Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Service Rules for the 698-746, 747-762 and 777-792 MHz Bands	)	WT Docket No. 06-150
	)	
	)	
Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band	)	PS Docket No. 06-229
	)	

THIRD FURTHER NOTICE OF PROPOSED RULEMAKING

Adopted: September 25, 2008 **Released: September 25, 2008**

By the Commission: Chairman Martin and Commissioners Tate, and McDowell issuing separate statements; Commissioner Copps concurring and issuing a statement; Commissioner Adelstein concurring in part, dissenting in part and issuing a statement.

Comment Date: [30 days after publication in the Federal Register]
Reply Comment Date: [40 days after publication in the Federal Register]

TABLE OF CONTENTS

Heading Paragraph #

I. INTRODUCTION

1. In this Third Further Notice of Proposed Rulemaking (Third Further Notice), we take the

next step toward achieving the goal of a nationwide interoperable broadband wireless network for public safety entities. We previously sought to achieve this goal through an innovative public/private partnership, which required the winning bidder of the commercial license in the Upper 700 MHz D Block (758-763/788-793 MHz) ("D Block") to partner with the nationwide licensee of the public safety broadband spectrum (763-768/793-798 MHz) ("Public Safety Broadband Licensee" or "PSBL") to enable construction of an interoperable broadband network that would serve both commercial and public safety users.[1] Because the auction of the D Block did not result in a winning bid, we issued the *Second Further Notice* revisiting the rules governing the mandatory public/private partnership, the D Block licensee, and the Public Safety Broadband Licensee, seeking comment broadly on how we might modify those rules to achieve our goals, whether we should continue to mandate a public/private partnership between the D Block licensee and Public Safety Broadband Licensee, and if so, under what terms and conditions.[2] We further indicated that, prior to adopting final rules, we would present for public comment a detailed proposal regarding specific proposed rules to address these issues.[3] In this Third Further Notice, we now offer and seek comment on the following proposals and tentative conclusions.

2. As an initial matter, we tentatively conclude that we should continue to require, as a license condition, that the D Block licensee enter into a public/private partnership with the Public Safety Broadband Licensee for the purpose of constructing a wireless broadband network that will operate over both D Block spectrum and public safety broadband spectrum and provide broadband services to both commercial users and public safety entities (shared wireless broadband network).[4] We find that a public/private partnership condition on the D Block remains the best option to achieve nationwide build-out of an interoperable broadband network for public safety entities, given the current absence of legislative appropriations for this purpose and the limited funding available to the public safety sector. We also propose to retain those current rules that will support this relationship. For example, we propose to continue requiring the parties to enter into a Network Sharing Agreement (NSA), and to make the NSA a condition of the grant of the D Block license(s). We also propose, however, to clarify and revise the rules to clearly establish the obligations of the parties to the partnership with greater specificity and detail. These clarifications and revisions address whether the D Block will be licensed on a nationwide or regional basis, the obligations of the parties regarding the construction and operation of the shared wireless broadband network, the rules governing the process for establishing an NSA between the parties, certain auction issues, and issues related to public safety users and the Public Safety Broadband Licensee.

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[1] *See* Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150, Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones, WT Docket No. 01-309, Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, WT Docket 03-264, Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission's Rules, WT Docket No. 06-169, Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229, Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, WT Docket No. 96-86, Declaratory Ruling on Reporting Requirement under Commission's Part 1 Anti-Collusion Rule, WT Docket No. 07-166, *Second Report and Order*, 22 FCC Rcd 15289 (2007) (*Second Report and Order*) *recon. pending*.

[2] *See* Service Rules for the 698-746, 747-762 and 777-792 Bands; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, WT Docket No. 06-150, PS Docket No. 06-229, 22 FCC Rcd 8047 (2008) (*Second Further Notice*).

[3] *See id.* at 8052 ¶ 7.

[4] Under our proposal, it is possible that there will be multiple regional D Block licenses or a single nationwide D Block license. Accordingly, references herein to "the" D Block license and licensee should be understood to incorporate reference to any of multiple D Block licenses or licensees, as appropriate. Our proposed rules should be interpreted in similar fashion.

We anticipate that, by establishing the rules governing the public/private partnership in a more comprehensive and detailed fashion, we will enhance the certainty of bidders regarding their potential obligations as D Block licensees, and facilitate the rapid and successful negotiation of NSAs as we would be significantly reducing the scope of issues that need to be negotiated.[5] Equally important, we seek in our proposals to meet the needs of the public safety community in a commercially viable manner. With these goals in mind, we make the following proposals.

3. First, we tentatively conclude that we should resolve two critical issues through the use of competitive bidding: (1) the appropriate geographic license area for the D Block, and (2) the need for a common broadband technology platform nationwide. We tentatively conclude that we can resolve these issues through competitive bidding by offering alternative sets of D Block licenses with different license areas and broadband technology conditions. With regard to the appropriate geographic area, we propose to offer the D Block both as a single nationwide license and on a regional basis, using geographic areas that we will refer to as Public Safety Regions (PSRs). PSRs would be comprised of fifty-five regions that mirror the geographic boundaries of the fifty-five 700 MHz Regional Planning Committee (RPC) regions, and three additional areas (for a total of 58 PSRs) to cover the whole country and match the geographic area of the nationwide license.[6] With regard to the broadband technology platform, we propose to establish rules that will ensure that a single broadband air interface is used nationwide regardless of whether there is a single licensee or multiple regional licensees, to ensure that public safety users may communicate when they roam outside their home regions.

4. To resolve both of these issues, we therefore propose to offer simultaneously three alternative sets of licenses that vary by geographic license area and by conditions regarding the technology platform that must be used by the licensee(s). Specifically, under this proposal, the Commission would offer (1) a single license for service nationwide with the technology platform to be determined by the licensee; (2) a nationwide set of PSR licenses conditioned on the use of Long Term Evolution (LTE) by the licensees; and (3) a nationwide set of PSR licenses conditioned on the use of Worldwide Interoperability for Microwave Access (WiMAX) by the licensees. The Commission will then award the D Block license(s) in the set that receives bids on licenses covering the greatest aggregate population, subject to the requirement that the license(s) must authorize service in areas covering at least half of the nation's population. If more than one set of licenses meeting these requirements cover the same population, the Commission will award the D Block licenses in the set that receives the highest aggregate gross bid. We also propose to establish auction procedures that will encourage bidding on licenses covering as much population as possible, including procedures to reduce minimum opening bids on unsold regional licenses during bidding under circumstances we specifically describe below. We also tentatively conclude that package bidding on licenses in the regional sets would serve the public interest and that we should direct the Wireless Telecommunications Bureau to propose and implement detailed package bidding procedures prior to bidding. We tentatively conclude that this method of assigning D Block licenses will be most likely to result in the successful development of a nationwide interoperable broadband network for public safety use, and provides a better means of addressing these issues than by specifying a single geographic licensing area or broadband technology in advance of competitive bidding. At the same time, it will provide all interested bidders with the necessary certainty at the time they make their bids of what conditions will be applicable to them should their bids be successful.

5. We propose significant clarifications and revisions of the parties' obligations regarding

[5] We have appended an NSA term sheet, which provides a summary of major terms that the parties must include in their agreement(s). *See, supra*, Appendix E.

[6] The three additional regions will cover (1) the Gulf of Mexico; (2) the Territory of Guam (Guam) and the Commonwealth of Northern Mariana Islands (Northern Mariana Islands); and (3) the Territory of American Samoa (American Samoa), and will be identical to the current Economic Area (EA) licensing areas for those same regions. *See* Appendix A.

the construction and operation of the shared wireless broadband network. These clarifications and revisions address (1) the use of spectrum in the shared wireless broadband network, including requirements regarding public safety priority access to commercial capacity in emergencies; (2) the technical requirements of the shared wireless broadband network; (3) the performance requirements of the D Block licensee(s); and (4) the respective operational roles of the D Block licensee(s) and the Public Safety Broadband Licensee. With regard to spectrum use, we first tentatively conclude that a D Block licensee may construct and operate its shared wireless broadband network using the entire 20 megahertz of D Block spectrum and public safety broadband spectrum as a combined, blended resource. Under this proposal, public safety users will still be guaranteed unconditionally preemptive access to 10 megahertz of capacity at all times, but the shared wireless broadband network may flexibly and dynamically assign frequencies from either the D Block or public safety spectrum to provide that capacity. Second, we propose to revise the rules governing public safety priority access to D Block spectrum capacity in emergencies. Our proposed revisions include: (1) specifying in detail the circumstances that trigger public safety priority access to commercial spectrum capacity; (2) providing that, in this context, "priority access" means only that a public safety user would be assigned the next available channel within the commercial spectrum over a commercial user, and does not include a right to preempt any ongoing commercial calls being carried over commercial spectrum capacity; (3) limiting the additional capacity that must be provided to public safety users in emergencies to a specified percentage of the D Block spectrum capacity; (4) requiring that public safety priority access to D Block spectrum capacity be limited to the time and geographic scope affected by the emergency; and (5) specifying the procedures for requesting and obtaining such access. Third, we tentatively conclude that the current rules for commercial access to public safety spectrum should remain the same subject to our clarification regarding blended use. Thus, we propose that commercial users will have secondary access to public safety's 10 megahertz of spectrum capacity subject to unconditional and immediate preemption when the spectrum capacity is needed by public safety users. Fourth, we find that our tentative proposals regarding spectrum use are consistent with the requirements of Section 337 of the Communications Act, as amended.

6. With regard to the technical requirements of the network, in addition to our proposal regarding the broadband technology platform, we make detailed proposals regarding (1) interoperability and public safety roaming; (2) availability, robustness, and hardening of the network; (3) capacity, throughput, and quality of service; (4) security and encryption; (5) power limits, power flux density limits, and related notification and coordination requirements; and (6) ensuring the availability of a satellite-capable handset.

7. With regard to the D Block license term and performance requirements, we propose to extend the license term to fifteen years and to adopt performance benchmarks applicable at the fourth, tenth, and fifteenth years following the license grant date. For the first two benchmarks, we propose to require D Block licensees to provide signal coverage and offer service to at least 40 percent of the population in each PSR by the end of the fourth year, and at least 75 percent by the end of the tenth year. For the final benchmark at the fifteenth year, we propose to adopt a "tiered" approach, applying one of three different population coverage requirements depending on the population density of the PSR: (1) for PSRs with an average population density of less than 100 people per square mile, the licensee would be required to provide signal coverage and offer service to at least 90 percent of the population within that PSR; (2) for PSRs with an average population density of at least 100 people per square mile and less than 500 people per square mile, the licensee would be required to provide signal coverage and offer service to at least 94 percent of the population within that PSR; and (3) for PSRs with an average population density of at least 500 people per square mile, the licensee would be required to provide signal coverage and offer service to at least 98 percent of the population within that PSR.

8. We also propose modifications to certain rules governing the establishment of the Network Sharing Agreement and the licensing of the D Block following bidding for D Block licenses, in order to increase the likelihood of successful, rapid deployment of the shared wireless broadband network. First, we tentatively propose that the Commission shall be able to offer any D Block license to a

second highest bidder in the event that the original winning bidder is not assigned the license, either due to a failure to enter into an NSA or for any reason. Second, we tentatively conclude that a winning bidder for a D Block license that is otherwise qualified will be liable for default payments only if it chooses not to execute a Commission-approved NSA. Thus, an otherwise-qualified winning bidder for a D Block license will not be liable for default payments if the lack of a Commission-approved NSA results from any other party's failure to execute the agreement or a Commission determination that there is no acceptable resolution to a dispute regarding terms to be included in the agreement. Finally, given our decision to offer alternative D Block licenses by auction, we tentatively conclude that we should adopt a D Block-specific rule regarding the amount of additional payments owed by any defaulting bidder. We propose a rule equivalent to our standard rule with respect to non-package bidding auctions, *i.e.,* that the Commission will provide that the additional payment will be between 3 and 20 percent of the applicable bid.

9. We also address certain additional issues related to the auction process. In particular, in order to further facilitate applications from potentially qualified parties, we tentatively conclude that we will not restrict the eligibility to bid of any party that may qualify to hold a D Block license and that no reserve price beyond the minimum opening bid(s) will apply. Furthermore, given the oversight that already applies to the D Block, we will codify an existing exception to our designated entity eligibility rules with respect to the spectrum capacity of D Block licenses, so that a designated entity applicant or licensee with lease or resale (including wholesale) arrangement(s) for more than 50% of the spectrum capacity of any D Block license will not on that basis alone lose its eligibility for designated entity benefits.[7]

10. We also make a number of tentative conclusions and proposals with regard to the rules governing public safety users and the Public Safety Broadband Licensee. We tentatively conclude that eligible users of the public safety broadband spectrum capacity must be providers of "public safety services" as defined in the Act.[8] We also propose to reaffirm our prior decision to grant the Public Safety Broadband Licensee sole discretion regarding whether to permit Federal public safety agency use of the public safety broadband spectrum capacity. Further, we tentatively conclude not to require eligible public safety users to subscribe to the shared broadband network.

11. With respect to the Public Safety Broadband Licensee, we tentatively conclude that it should remain a non-profit entity, and propose certain restrictions on its business relationships to avoid the potential for conflicts of interest. Specifically, we propose that an entity serving as an advisor, agent, or manager of the Public Safety Broadband Licensee will be ineligible to become a D Block licensee unless such entity completely severs its business relationship with the Public Safety Broadband Licensee no later than thirty days following release of an order adopting final rules in this proceeding. Further, we propose to prohibit advisors, agents, or managers of the Public Safety Broadband Licensee from establishing business relationships with third party entities having a financial interest in the decisions of the Public Safety Broadband Licensee.

12. With respect to the mechanism of funding the Public Safety Broadband Licensee, we tentatively conclude that the nationwide D Block licensee or, if the D Block is licensed on a regional basis, each regional D Block licensee, will make an annual payment to the Public Safety Broadband Licensee, which would constitute the sole allowable source of funding for the Public Safety Broadband Licensee's annual operating and administrative costs. We further tentatively conclude that the Public

[7] Because this exception does not extend to arrangements for use of the spectrum capacity of licenses *other than* the D Block license, if an applicant or licensee has an impermissible material relationship with respect to the spectrum capacity of any other license(s), the normal operation of the Commission's rules will continue to render it ineligible for designated entity benefits for the D Block license.

[8] *See* 47 U.S.C. § 337(f)(1).

Safety Broadband Licensee must establish an audited annual budgeting process, and must submit its proposed annual budget to the Commission for approval. The Commission also reserves the right to request an audit of the Public Safety Broadband Licensee's expenses at any time. We further tentatively conclude that we should establish fixed nationwide service fees that the D Block licensee may charge to public safety users based on a discounted rate schedule.

13. We propose several changes to the Public Safety Broadband Licensee's articles of incorporation and by-laws. Specifically, we propose replacing the Public Safety Broadband Licensee board of directors position currently held by the National Emergency Management Association (NEMA) with the National Regional Planning Council (NRPC). We also tentatively conclude that the positions of Chairman of the Board and Chief Executive Officer must be filled by separate individuals; that the Public Safety Spectrum Trust Corporation (PSST) may not hire a new individual to fill the CEO position until the D Block licensee(s) has made funding available to the PSST for its administrative and operational costs; and that any individual appointed as CEO cannot have served on the Public Safety Broadband Licensee executive committee during the period three years prior to his or her appointment as CEO. We also tentatively conclude that the PSST board should elect a new executive committee with proposed new conditions on term limits, consecutive terms, and committee size. Further, we tentatively conclude that we will require three-fourths supermajority voting on all major decisions by the board, that board meetings be open to the public (with some exceptions), that the minutes of each board meeting must be made publicly available (again with some exceptions), and several other conditions. We tentatively decline to rescind the present PSST's license and reissue the license to a new licensee.

14. In relation to narrowband relocation issues, we tentatively conclude that we will extend the current February 17, 2009 deadline for completing such relocation to twelve months from the date upon which narrowband relocation funding is made available by the D Block licensee(s). We also propose that the current $10 million cap on narrowband relocation costs should be increased to $27 million. We also tentatively conclude that the existing August 30, 2007 cut-off date for narrowband deployments outside of the consolidated narrowband spectrum should not be changed, and propose conditions under which waiver relief may be granted for deployment of narrowband equipment beyond that date.

15. We seek comment on all of the tentative conclusions and proposals presented in this Third Further Notice, and on whether these proposals will lead to a successful auction and, more importantly, a successful partnership or partnerships that will fulfill the Commission's goal of making interoperable broadband wireless service available to public safety entities across the Nation.

II. BACKGROUND

16. In this section, we review the history of the Commission's efforts to establish a public/private partnership to address the need for nationwide interoperable public safety communications and to promote public safety access to advanced broadband communication systems and technologies. We first describe the rules we promulgated in the *Second Report and Order*, which established two nationwide 700 MHz licenses, the Public Safety Broadband License and the commercial D Block license, and required the licensees to enter into a public/private partnership for the purpose of constructing and operating a nationwide wireless broadband network meeting specified terms. We review petitions for reconsideration of the *Second Report and Order* that raised issues related to this proceeding. We briefly discuss Auction 73, the auction of commercial 700 MHz licenses concluded earlier this year in which we auctioned the D Block under the public/private partnership rules but did not receive a winning bid. Finally, we summarize the *Second Further Notice*, which commenced the process of revisiting and reconsidering the public/private partnership rules that we continue now in the present Third Further Notice.

A. 700 MHz Second Report and Order

17. The commercial and public safety spectrum bands at issue in this proceeding are part of

the 700 MHz Band (698-806 MHz), which is currently occupied by television broadcasters, but which must be cleared of such transmissions and made available for wireless services by February 17, 2009, as part of the digital television ("DTV") transition.[9] Pursuant to Congress's direction in the Balanced Budget Act of 1997 ("Balanced Budget Act"), codified at section 337(a) of the Act, the Commission has allocated, in the Upper 700 MHz Band (746-806 MHz), 24 megahertz of spectrum for public safety services and 36 megahertz for commercial services.[10]

18. In the *Second Report and Order*, we established, among other rules regarding the 700 MHz Band, rules for the 700 MHz public safety spectrum and one block of the Upper 700 MHz commercial spectrum that would promote the creation of a nationwide, interoperable broadband public safety network. With regard to the public safety spectrum, we designated the lower half of the spectrum (the 763-768 MHz and 793-798 MHz bands) for public safety broadband communications, and consolidated existing narrowband allocations, previously located in both the lower and upper ends of the public safety spectrum, in the upper half of the spectrum (the 769-775 MHz and 799-805 MHz bands) exclusively.[11] We also created a single nationwide license for the public safety broadband spectrum, the Public Safety Broadband License, and we specified the criteria, selection process, and responsibilities of the licensee assigned this spectrum, including a requirement that the licensee must be a non-profit organization.[12]

19. With regard to the commercial spectrum in the 700 MHz Band, and as described in greater detail below, we created a nationwide license in the D Block (the 758-763 MHz and 788-793 MHz bands, located adjacent to the public safety broadband spectrum), and required the D Block licensee, working with the Public Safety Broadband Licensee in a public/private partnership (the "700 MHz Public/Private Partnership") and using the spectrum associated with both licenses, to construct and operate a nationwide network that would be shared by commercial and public safety users.[13]

20. *700 MHz Public/Private Partnership.* We mandated the 700 MHz Public/Private Partnership between two nationwide licensees to promote the rapid deployment of a nationwide, interoperable, broadband public safety network that was robust, cost effective, spectrally efficient, and based on a flexible IP-based, modern architecture.[14] We found that nationwide licensing would best serve these goals by centralizing the responsibilities for implementing and administering a broadband network across the entire country, creating economies of scale, and avoiding a fragmented approach to network construction. We further determined that the public/private partnership, by promoting commercial investment in the build-out of a shared network infrastructure for both commercial and public safety users, would address "the most significant obstacle to constructing a public safety network – the limited

[9] *See* Deficit Reduction Act of 2005, Pub. L. No. 109-171, 120 Stat. 4 (2006).

[10] *See* Balanced Budget Act of 1997, Pub. L. No. 105-33, 111 Stat. 251 § 3004 (1997) (adding new § 337 of the Communications Act); Reallocation of Television Channels 60-69, the 746-806 MHz Band, ET Docket No. 97-157, *Report and Order*, 12 FCC Rcd 22953, 22955 ¶ 5 (1998), *recon.* 13 FCC Rcd 21578 (1998) (*Upper 700 MHz Reallocation Order*).

[11] *See Second Report and Order,* 22 FCC Rcd at 15406 ¶ 322. We also created an internal guard band in the 768-769 MHz and 798-799 MHz bands located between the broadband and narrowband allocations. *Id*.

[12] *See Second Report and Order*, 22 FCC Rcd at 15406 ¶ 322.

[13] *Id*. at 15428 ¶ 386.

[14] *Id.* at 15420 ¶ 369, 15431 ¶ 396. *See also* Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, PS Docket No. 06-229, WT Docket No. 96-86, *Ninth Notice of Proposed Rulemaking*, 21 FCC Rcd 14837, 14842-43 (2006) (*700 MHz Public Safety Ninth Notice*).

availability of public funding."[15] We concluded that providing for a shared infrastructure using the D Block and the public safety broadband spectrum would help achieve significant cost efficiencies. We noted that this would allow public safety agencies "to take advantage of commercial, off-the-shelf technology and otherwise benefit from commercial carriers' investments in research and development of advanced wireless technologies."[16] We stated that this approach would also benefit the public safety community by providing it with access to an additional 10 megahertz of broadband spectrum during emergencies.[17] Most importantly, we anticipated that this particular public/private partnership approach would provide all of these public safety benefits on a nationwide basis.[18] We noted that the 700 MHz Public/Private Partnership would also provide the D Block licensee with benefits, including the right to operate commercial services in the 10 megahertz of public safety broadband spectrum on a secondary, preemptible basis, which would both help to defray the costs of build-out and ensure that the spectrum is used efficiently.[19]

21. To ensure that the 700 MHz Public/Private Partnership would serve the needs of the public safety community and to address concerns about its success, we specified certain mandatory features. First, we specified requirements regarding the shared network to be constructed and the timing for that construction. In particular, we established certain technical requirements for the shared network, including requirements relating to the network technology platform, signal coverage, robustness and reliability, capacity, security, operational capabilities and control, and certain equipment specifications.[20] With regard to the spectrum shared by the common network, we required that the Public Safety Broadband Licensee lease the public safety broadband spectrum for commercial use by the D Block licensee on a secondary, preemptible basis, and that the public safety entities have priority access to the D Block spectrum during emergencies.[21] To ensure timely construction and nationwide coverage, we specified performance requirements, including three population-based build-out benchmarks requiring the D Block licensee to provide signal coverage and offer service to (1) at least 75 percent of the population of the nationwide D Block license area by the end of the fourth year after the DTV transition date, (2) at least 95 percent of the population of the nationwide license area by the end of the seventh year, and (3) at least 99.3 percent of the population of the nationwide license area by the end of the tenth year.[22]

22. Next, while finding it appropriate to establish these mandatory terms, we also concluded that many details of the 700 MHz Public/Private Partnership should be left to the parties to negotiate.[23] Accordingly, we established that the terms of the 700 MHz Public/Private Partnership would be governed both by Commission rules and by a Network Sharing Agreement ("NSA") between the winning bidder for the D Block license and the Public Safety Broadband Licensee.[24] We further provided rules governing the process by which the parties would establish the NSA, requiring among other things that negotiations begin by a date certain and conclude within six months, and providing that the D Block license

[15] *Second Report and Order*, 22 FCC Rcd at 15431 ¶ 396.

[16] *Id*.

[17] *Id.*

[18] *Id.*

[19] *Id*.

[20] *Id.* at 15433-34 ¶ 405.

[21] *Id*. at 15432 ¶ 399, 15434-43 ¶¶ 407-31.

[22] *Id*. at 15432 ¶ 399, 15433-44 ¶¶ 403-06, 15443-46 ¶¶ 432-43.

[23] *Id.* at 15488 ¶ 447.

[24] *Id*. at 15432 ¶¶ 399-400, 15447-49 ¶¶ 444-54.

application would not be granted until the parties obtained Commission approval of the agreement, executed the approved agreement, and then filed it with the Commission.[25] We further specified rules to govern in the event of a negotiation dispute. Specifically, we provided that if, at the end of the six month negotiation period, or on their own motion at any time, the Chiefs of the Public Safety and Homeland Security Bureau ("PSHSB") and the Wireless Telecommunications Bureau ("WTB") found that negotiations had reached an impasse, they could take actions including but not limited to issuing a decision on the disputed issues and requiring the submission of a draft agreement consistent with their decision.[26] We also provided that if the D Block winning bidder failed to comply with the procedures we established for negotiation or dispute resolution, failed to receive final Commission approval of an NSA, or failed to execute an approved NSA, it would be deemed to have defaulted on its license and would be subject to the default payments required by Section 1.2109 of our rules.[27]

23. We also established a number of measures to safeguard the interests of public safety on an ongoing basis after the NSA is executed. These measures included: (1) requirements related to the organization and structure of the 700 MHz Public/Private Partnership, intended to protect the D Block license and network assets from being drawn into a bankruptcy proceeding; (2) a prohibition on discontinuance of service provided to public safety entities; (3) special remedies in the event that the D Block licensee or Public Safety Broadband Licensee fail to comply with either the Commission's rules or the terms of the NSA; (4) a special, exclusive process for resolving any disputes related to the execution of the terms of the NSA; and (5) ongoing reporting obligations.[28]

24. *Reserve Price for the Auction of the D Block.* In the *Second Report and Order*, we also concluded that block-specific aggregate reserve prices should be established for each commercial license block – the A, B, C, D, and E Blocks – to be auctioned in Auction 73, and directed WTB to adopt and publicly disclose those reserve prices prior to the auction, pursuant to its existing delegated authority and consistent with our directions.[29] For the D Block, we concluded that WTB should consider certain factors in setting the D Block reserve price, including the 700 MHz Public/Private Partnership conditions, which might suggest a reserve price of $1.33 billion. We provided that, in the event that bids for the D Block license did not meet the reserve price, we would leave open the possibility of offering the license on the same terms or re-evaluating the D Block license conditions.[30]

25. *Narrowband Relocation.* As discussed above, to promote public safety access to a nationwide, interoperable broadband network, we designated the lower half of the public safety spectrum for public safety broadband communications, and consolidated existing narrowband allocations, previously located in both the lower and upper ends of the public safety spectrum, in the upper half of the spectrum.[31] We also shifted the entire public safety band down one megahertz, so that it would be immediately adjacent to the D Block spectrum, to further facilitate the development of a shared wireless broadband network over both D Block and public safety broadband spectrum.[32] Both the 1-megahertz

[25] *Id*. at 15448 ¶ 447.

[26] *Id*. at 15465 ¶ 508.

[27] *Id.* at 15466 ¶ 511.

[28] *Id.* at 15466-71 ¶¶ 513-30.

[29] *See id.* at 15400 ¶ 301.

[30] *See id.* at 15404 ¶ 314.

[31] *See id.* at 15406 ¶ 322. We also created an internal guard band in the 768-769 MHz and 798-799 MHz bands located between the broadband and narrowband allocations. *Id*.

[32] *See id.* at 15333 ¶ 111.

shift and the narrowband consolidation, however, left certain existing public safety narrowband operations outside of the spectrum now designated for narrowband services.

26. We provided in the *Second Report and Order* that all 700 MHz narrowband public safety operations outside of the newly consolidated narrowband spectrum must be relocated to that spectrum no later than the DTV transition date.[33] To effectuate the consolidation of the narrowband channels, we required the D Block licensee to pay the costs of relocating narrowband radios and capped the disbursement amount for such relocation costs at $10 million.[34] We also cautioned that any narrowband equipment deployed in the 764-770 MHz and 794-800 MHz bands (channels 63 and 68), or in the 775-776 MHz and 805-806 MHz bands (the upper one megahertz of channels 64 and 69), more than 30 days following the adoption date of the *Second Report and Order* would be ineligible for relocation funding.[35] In addition, we prohibited authorization of any new narrowband operations in that spectrum, as of 30 days following the adoption date of the *Second Report and Order*.[36] Subsequent to the release of the *Second Report and Order*, we granted limited waivers to two parties that permitted them to continue to deploy new narrowband operations outside the consolidated narrowband spectrum after August 30, 2007.[37] We deferred decision on other issues raised by their requests, however, including the appropriate duration of the relief and whether the parties would be entitled to reimbursement for the costs of relocating narrowband operations deployed after August 30, 2007.

B. Petitions for Reconsideration

27. Ten parties filed petitions for reconsideration seeking review of various aspects of the *Second Report and Order*.[38] Three of the petitions sought reconsideration of the rules governing the 700

[33] *Id.* at 15410 ¶ 332.

[34] *Id.* at 15412 ¶ 341.

[35] *Id.* at 15412 ¶ 339.

[36] *Id.*

[37] *See* Implementation of a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band; Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, PS Docket No. 06-229, WT Docket No. 96-86, *Order*, 22 FCC Rcd 20290 (2007); Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band; Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010; Request for Waiver of Pierce Transit, PS Docket No. 06-229, WT Docket No. 96-86, *Order*, 23 FCC Rcd 433 (PSHSB 2008).

[38] AT&T Inc. Petition for Reconsideration and Clarification, WT Docket No. 06-150; PS Docket No. 06-229 (filed Sept. 24, 2007) (AT&T Petition for Reconsideration); Blooston Rural Carriers Petition for Partial Reconsideration and/or Clarification, WT Docket No. 06-150; PS Docket No. 06-229 (filed Sept. 24, 2007) (Blooston Petition for Reconsideration); Petition for Reconsideration of the Ad Hoc Public Interest Spectrum Coalition, WT Docket No. 06-150; PS Docket No. 06-229 (filed Sept. 24, 2007) (PISC Petition for Reconsideration); Cyren Call Communications Corporation Petition for Reconsideration and for Clarification, WT Docket No. 06-150; PS Docket No. 06-229 (filed Sept. 24, 2007) (Cyren Call Petition for Reconsideration); Frontline Wireless, LLC Petition for Reconsideration (filed Sept. 24, 2007); Pierce Transit Petition for Reconsideration, WT Docket No. 06-150; PS Docket No. 06-229 (filed Sept. 24, 2007) (Pierce Transit Petition for Reconsideration); Rural Telecommunications Group, Inc. Petition for Reconsideration, WT Docket No. 06-150; PS Docket No. 06-229 (filed Sept. 24, 2007) (RTG Petition for Reconsideration); Commonwealth of Virginia Petition for Reconsideration, WT Docket No. 06-150; PS Docket No. 06-229 (filed Sept. 24, 2007) (Virginia Petition for Reconsideration); NTCH, Inc. Petition for Partial Reconsideration, WT Docket No. 06-150; PS Docket No. 06-229 (filed Sept. 21, 2007) (NTCH Petition for Reconsideration); MetroPCS Communications, Inc. Petition for Clarification and Reconsideration, WT Docket No. 06-150; PS Docket No. 06-229 (filed Sept. 20, 2007) (MetroPCS Petition for Reconsideration).

MHz Public/Private Partnership specifically.[39] All three of these petitioners argued that the application of the default payment rules to the D Block winner in the event of a failure to establish an NSA should be modified, for example, by imposing such payment obligations only if the D Block winner is found to have negotiated in bad faith.[40] One petitioner also argued that network requirements should be specified more precisely for potential bidders prior to auction.[41] Conversely, another of these petitioners argued that, in some respects, the technical requirements in the rules were too specific, and that the Commission should "not prematurely rule on specific technical issues, [and] should instead allow the [Public Safety Broadband Licensee] and D Block winner to develop those details as they negotiate the NSA . . . ."[42]

28. Two of the ten petitioners sought reconsideration of the aggregate reserve prices set for the commercial license blocks, including the reserve price for the D Block.[43] These petitioners presented related arguments in the pre-auction process.[44] After considering the arguments, WTB established reserve prices consistent with the direction of the *Second Report and Order*, including setting a $1.33 billion reserve price for the D Block.[45]

29. Finally, two other parties filed petitions seeking reconsideration of some or all of the requirements regarding public safety narrowband relocation, as well as requests for waiver of some of these requirements.[46] The requests for waiver have since been granted in part.[47] The two petitions, however, together with the other petitions seeking reconsideration of the *Second Report and Order*, remain pending.

C. Auction 73

30. *Results of the Auction.* The auction of the D Block and other 700 MHz Band licenses, designated Auction 73, commenced on January 24, 2008, and closed on March 18, 2008.[48] While the bids for licenses associated with the other 700 MHz Band blocks offered at Auction 73 (the A, B, C, and E

[39] *See* AT&T Petition for Reconsideration; Cyren Call Petition for Reconsideration; Frontline Petition for Reconsideration. The Frontline September 20, 2007 Request also seeks changes to the rules governing the 700 MHz Public/Private Partnership. *See* Request to Further Safeguard Public Safety Service by Frontline Wireless, WT Docket No. 06-150 (filed Sept. 20, 2007) (Frontline September 20, 2007 Request).

[40] *See* AT&T Petition for Reconsideration at 7-9; Cyren Call Petition for Reconsideration at 5-7; Frontline Petition for Reconsideration at 23-25.

[41] *See* AT&T Petition for Reconsideration at 5.

[42] *See* Frontline Petition for Reconsideration at 22. *See also* Cyren Call Petition for Reconsideration at 7.

[43] *See*, *generally*, Frontline Petition for Reconsideration; MetroPCS Petition for Reconsideration.

[44] *See* Auction of 700 MHz Band Licenses Scheduled for January 24, 2008; Notice and Filing Requirements, Minimum Opening Bids, and other Procedures for Auctions 73 and 76, *Public Notice,* 22 FCC Rcd 18141, 18194-95 ¶¶ 197-90 (2007) (*Auction 73/76 Procedures Public Notice*).

[45] *See id.* at 18193-96 ¶¶ 194-200.

[46] *See* Virginia Petition for Reconsideration; Pierce Transit Petition for Reconsideration.

[47] *See* Implementation of a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band; Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, PS Docket No. 06-229, WT Docket No. 96-86, *Order*, 22 FCC Rcd 20290 (2007); Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band; Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010; Request for Waiver of Pierce Transit, PS Docket No. 06-229, WT Docket No. 96-86, *Order*, 23 FCC Rcd 433 (PSHSB 2008).

[48] *See* Auction 73, 700 MHz Band, at http://wireless.fcc.gov/auctions/default.htm?job=auction_summary&id=73.

Blocks) exceeded the applicable aggregate reserve prices for those blocks, the nationwide D Block license received only a single bid that did not meet its reserve price of $1.33 billion and thus did not become a winning bid.[49] On March 20, 2008, we determined that we would not proceed immediately to re-auction the D Block license in order to provide us additional time to consider our options.[50]

31. *Inspector General's Report*. On April 25, 2008, the Office of Inspector General (OIG) issued a report on its investigation of allegations that certain statements made by an advisor to the Public Safety Broadband Licensee to potential bidders for the D Block license in Auction 73, particularly those regarding the spectrum lease payments that the Public Safety Broadband Licensee would request from the D Block licensee for use of public safety spectrum, had the effect of deterring various companies from bidding on the D Block.[51] The OIG determined that the statements in question were "not the only factor in the companies' decision not to bid on the D Block." Rather, it concluded that "the uncertainties and risks associated with the D Block, including, but not limited to, the negotiation framework with [the Public Safety Broadband Licensee], the potential for default payment if negotiations failed, and the costs of the build-out and the operations of the network, taken together, deterred each of the companies from bidding on the D Block."[52]

D. Second Further Notice of Proposed Rulemaking

32. On May 14, 2008, to begin the process of reconsidering the appropriate rules for the D Block and the Public Safety Broadband License, we released the *Second Further Notice of Proposed Rulemaking* (*Second Further Notice*). In the *Second Further Notice*, we enumerated the following goals and principles for this rulemaking proceeding:

- To facilitate public safety access to a nationwide, interoperable broadband network in a timely manner;
- To identify concerns in the existing structure of the 700 MHz Public/Private Partnership to inform our decision making going forward;
- To promote wireless innovation and broadband network penetration while meeting the communications needs of the first responder community in a commercially viable manner;
- To identify funding opportunities for the public safety community to realize the promise of a broadband communications infrastructure with a nationwide level of interoperability; and
- To maximize the commercial and public safety benefits of the D Block spectrum.[53]

33. With these goals and principles in mind**,** we sought comment first on whether and how to clarify or revise the rules governing the public safety component of the 700 MHz Public/Private Partnership, including rules governing the Public Safety Broadband Licensee, the entities eligible to

[49] *See id.*; *see also* Auction of 700 MHz Band Licenses Closes, *Public Notice*, DA 08-595 (rel. Mar. 20, 2008) (*700 MHz Auction Closing Public Notice*). http://wireless.fcc.gov/auctions/default.htm?job=auction_summary&id=73. Specifically, a bid of $472 million was entered by Qualcomm in Round 1 of the auction.

[50] *See* Auction of the D Block License in the 758-763 and 788-793 Bands, AU Docket No. 07-157, *Order*, 23 FCC Rcd 5421, ¶ 5 (2008) (*D Block Post-Auction Order*).

[51] *See Office of Inspector General Report*, from Kent R. Nilsson, Inspector General, to Chairman Kevin J. Martin (OIG rel. Apr. 25, 2008) (*OIG Report*).

[52] *OIG Report* at 2.

[53] *See Second Further Notice*, 23 FCC Rcd at 8052 ¶ 6.

obtain access to the public safety broadband network,[54] and the relocation of public safety narrowband operations.

34. With regard to the Public Safety Broadband Licensee, we sought comment on (1) whether to revise or clarify the structure and criteria of the Public Safety Broadband Licensee as adopted in the *Second Report and Order*, including whether to clarify the requirement that the Public Safety Broadband Licensee must be a non-profit organization;[55] (2) how the Public Safety Broadband Licensee should be funded;[56] (3) whether to adopt additional measures to better enable Commission or Congressional oversight of the Public Safety Broadband Licensee's activities;[57] and (4) whether, in light of these and other possible changes, we should rescind the current Public Safety Broadband License and seek new applicants.[58]

35. Regarding access to the public safety broadband network, we sought comment on (1) whether to clarify which entities are eligible to use the public safety broadband network; (2) whether to adopt measures requiring or promoting use of the public safety broadband network by eligible public safety entities;[59] (3) whether State governments should have a role in coordinating the participation of public safety entities in the public safety broadband network;[60] and (4) whether to revise the rules regarding use of the public safety broadband network by Federal public safety agencies.[61]

36. With regard to the relocation of public safety narrowband operations, we sought comment on issues including (1) whether to revise or eliminate the cap on relocation expenses; (2) whether, in light of the proposed re-auction of the D Block and associated timing issues, we should continue to require relocation to be completed by the DTV transition date; (3) whether to amend the process for accomplishing the relocation; and (4) whether we should extend the August 30, 2007 cut-off date for new narrowband deployments outside the consolidated narrowband spectrum.[62]

37. Turning to the 700 MHz Public/Private Partnership, we asked, as a central matter, whether we should continue to require the D Block licensee and the Public Safety Broadband Licensee to enter into a 700 MHz Public/Private Partnership.[63] We further sought comment on a broad set of possible revisions to the 700 MHz Public/Private Partnership in the event we continued that requirement, and on which changes would best serve the goal of making a broadband, interoperable network available on a nationwide basis to public safety entities.[64]

38. In particular, we sought comment on (1) whether to establish a single nationwide D

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[54] *See id.* at 8058-8062 ¶¶ 24-32. The term "public safety broadband network," which we have used in the *Second Further Notice* and again in this Third Further Notice, refers to those functions and services of the shared network to which the Public Safety Broadband Licensee will administer access.

[55] *See id.* at 8064 ¶ 40, 8067 ¶ 48.

[56] *See id.* at 8065-8065 ¶¶ 42-45

[57] *See id.* at 8067 ¶ 48, 8068 ¶ 51.

[58] *See id.* at 8068 ¶ 53.

[59] *See id.* at 8063 ¶ 37.

[60] *See id.* at 8068 ¶ 52.

[61] *See id.* at 8092-93 ¶ 126.

[62] *See id.* at 8111 ¶¶ 180-182.

[63] *See id.* at 8069 ¶ 54.

[64] *See id.* at 8069 ¶ 54, 8070 ¶ 58.

Block licensee or create multiple D Block licenses with, for example, Regional Economic Area Grouping (REAG) geographic license areas;[65] (2) whether to revise or clarify the technical requirements of the shared network that the D Block licensee must construct;[66] (3) whether we should continue to require that the D Block licensee provide the Public Safety Broadband Licensee, in emergencies, with priority access to the D Block spectrum, and if so, whether we should specify the circumstances that constitute an emergency for this purpose or establish other limits to such emergency priority access;[67] (4) whether to revise the D Block licensee's network build-out or performance requirements and the extent to which they could be met through non-cellular technologies such as Mobile Satellite Systems (MSS);[68] (5) whether to revise or clarify the respective operational roles of the D Block licensee and the Public Safety Broadband Licensee in the provision of network services to public safety users once the shared network is constructed;[69] and (6) whether we should regulate network service fees.[70]

39. We further sought comment on the process by which these parties would establish a NSA that would further define the terms of the 700 MHz Public/Private Partnership. Among other issues, we sought comment regarding (1) what rules should apply to the negotiation of the NSA; (2) whether to adopt dispute resolution procedures in the event the parties are unable to negotiate a voluntary agreement on NSA terms and if so, whether such procedures should include mandatory and binding adjudication of the disputes; (3) in the event that the process, with or without adjudication, is ultimately unsuccessful in establishing an NSA, whether and to what extent the D Block winner should be held liable for default payments; (4) whether, in the event of a failure to establish an NSA, the Commission should offer the D Block license to the next highest bidder or immediately re-auction it without the 700 MHz Public/Private Partnership condition; and (5) if a further re-auction is required, whether the D Block winning bidder should be prohibited from participating.[71]

40. We also sought comment on a number of other auction-related issues, including (1) whether to restrict who may participate in the new auction of the D Block license; (2) whether to establish a reserve price for such an auction and if so, at what level;[72] (3) whether to adopt an exception to the impermissible material relationship rule for the determination of designated entity eligibility with respect to arrangements for the lease or resale (including wholesale) of the spectrum capacity of the D Block license;[73] and (4) whether to modify the amount of the default payment potentially applicable to the D Block winning bidder.[74]

41. In addition to seeking comment on rules in the event that we retain the 700 MHz Public/Private Partnership requirement, we also sought comment on alternative rules for both the D Block and the Public Safety Broadband License in the event that we do not retain the requirement. For the D Block, we sought comment in particular on the appropriate geographic license area, performance

[65] *See id.* at 8109-8112 ¶¶ 183-86.

[66] *See id.* at 8071-78 ¶¶ 61-83.

[67] *See id.* at 8079-80 ¶¶ 85-87.

[68] *See id.* at 8081-86 ¶¶ 90-105

[69] *See id.* at 8088-89 ¶¶ 113-16, 8090-92 ¶¶ 121-26.

[70] *See id.* at 8094-95 ¶¶ 131-33.

[71] *See id.* at 8096-8100 ¶¶ 138-54.

[72] *See id.* at 8104 ¶¶ 163-64.

[73] *See id.* at 8105-06 ¶¶ 166-67.

[74] *See id.* at 8108-09 ¶¶ 172-75.

requirements, license block size and license term, power and out-of-band-emission (OOBE) limits, and licensing partitioning and disaggregation rules, and whether to impose conditions such as an open-platform or wholesale requirement.[75] For the Public Safety Broadband Licensee, we sought comment on how we might still achieve the goal of ensuring that a nationwide, interoperable broadband network is available for use of public safety, and whether there are rules we should impose on the Public Safety Broadband Licensee to achieve that goal.[76]

42. Finally, we provided in the *Second Further Notice* that, before adopting final rules to address the issues raised therein, we would present for public comment, in a subsequent further notice of proposed rulemaking, a detailed proposal including the specific rules that we intended to promulgate.[77] We further indicated that we would seek comment on an expedited basis.[78]

III. DISCUSSION

A. Whether to Retain the 700 MHz Public/Private Partnership Condition

43. Background. In the *Second Report and Order*, we established rules mandating a public/private partnership between two nationwide licensees in the 700 MHz spectrum, the licensee of the commercial D Block and the Commission-designated licensee of the public safety broadband spectrum (Public Safety Broadband Licensee), to address the critical need of public safety users for interoperable, broadband communications. These rules required the D Block licensee to construct and operate a nationwide, interoperable broadband network across both the D Block and 700 MHz public safety broadband spectrum to provide broadband network services to both commercial and public safety entities.

44. We found that promoting commercial investment in the build-out of a shared network infrastructure would address the most significant obstacle to constructing a public safety network – the limited availability of public funding. We further determined that the network, by relying on a shared infrastructure to provide both commercial and public safety services, would achieve significant cost efficiencies, and benefit public safety agencies by allowing them to take advantage of off-the-shelf technology and commercial carriers' investments in research and development of advanced wireless technologies, as well as provide them with access to an additional 10 megahertz of broadband spectrum during emergencies. We concluded that the public/private partnership approach thus provided the most practical means of speeding deployment of a nationwide, interoperable, broadband network for public safety service that is designed to meet their needs in times of crisis. At the same time, we noted, it would provide the D Block licensee with rights to operate commercial services in the 10 megahertz of public safety broadband spectrum on a secondary, preemptible basis, which we anticipated would help to defray the costs of build-out and also ensure that the spectrum is used efficiently.

45. In the *Second Further Notice*, we sought comment on whether the public interest would best be served by the development of a nationwide, interoperable wireless broadband network for both commercial and public safety services through the 700 MHz Public/Private Partnership between the D Block licensee and the Public Safety Broadband Licensee, and whether we should therefore continue to require that the D Block licensee and Public Safety Broadband Licensee enter into the 700 MHz Public/Private Partnership.

46. Comments. In response to the *Second Further Notice*, numerous commenters representing both public safety and commercial interests support continuing to require a public/private

[75] *See id.* at 8115-16 ¶¶ 192-205.

[76] *See id.* at 8119-20 ¶¶ 206-212.

[77] *See id.* at 8052 ¶ 7.

[78] *See id.* at 8052 n.10.

partnership between the D Block licensee and the Public Safety Broadband Licensee.[79] These commenters emphasize the importance of providing public safety first responders with an interoperable broadband wireless network[80] and they argue that a public/private partnership remains the best and possibly the only means of achieving these goals.[81] In particular, they argue that a public/private partnership is the only viable means of funding the construction of a nationwide network.[82] While noting that legislative appropriations could theoretically fund such a network, they assert that such funding is not going to be forthcoming, or that it is too uncertain for the Commission to rely upon.[83]

47. Commenters point to other benefits of the public/private partnership as well. Several argue, for example, that by sharing spectrum between commercial and public safety users, the public/private partnership will promote spectrum efficiency.[84] AT&T, discussing the benefits of public/private partnerships more generally, also asserts that the commercial partner in a public/private partnership can "leverage existing networks, technical assets, and spectrum resources to develop the interoperable network as quickly and efficiently as possible" and that it might rely on "previous experiences constructing wireless networks to ensure the construction of a reliable and effective public/private wireless broadband network."[85]

48. A number of commenters either oppose or express strong concerns regarding retaining

[79] *See* ACT Comments at 1; ALU Comments at 1; AASHTO Comments at 7; APCO Comments at 3; AT&T Comments at 2-4; Big Bend Comments at 1; California Comments at 7; Cellular South Comments at 1-2; Ericsson Comments at 3; IMSA *et al.* Comments at 1-2; MSUA Comments at 1; MSV Comments at i; NAEMT Comments at 1; NATOA *et al.* Comments at 7; NENA Comments at 2; NPSTC Comments at 1; NRPC Comments at 4; NTCH Comments at 1-2; PSST Comments at 4; RCA Comments at 1; RPC 6 Comments at 3; RPC 33 Comments at 2 (supporting the partnership "as long as there is regional and/or local control over the applied use of this network"); Seybold Comments at 2; SIEC Comments at 1; Sprint Nextel Comments at 9; TeleCommUnity Comments at 3, 5-6; Televate Comments at 3; TE M/A-COM Comments at 3; US Cellular Comments at 1; Coverage Co. Comments at 1; VFCA Comments at 3; WFCA Comments at 1; AASHTO Reply Comments at 1; Cyren Call Reply Comments at 2; IACPNSA Reply Comments at 1; ICMA Reply Comments at 2; ITS America Reply Comments at 2; NPSTC Reply Comments at 3; Sprint Nextel Reply Comments at 2-3; Space Data Reply Comments at 2; SouthernLINC Reply Comments at ii.

[80] *See* AASHTO Comments at 7 (asserting that, "[w]ithout a single network using a common technology as its basis, our nation's emergency response and disaster relief workers will continue to be hampered in their ability to respond to any call for assistance in the wake of a natural or man caused situation."); Cellular South Comments at 1; Ericsson Comments at 3; Peha Comments at 2; MSUA Comments at 1; NAEMAT Comments at 2; NPSTC Comments at 6; PSST Comments at 4; Qualcomm Comments at 7; SIEC Comments at 1.

[81] *See*, *e.g.*, APCO Comments at 3; Ericsson Comments at 3; IMSA *et al.* Comments at i; RCA Comments at 1. *See also* AT&T Comments at 2-3; Cellular South Comments at 1, 2; IMSA *et al.* Reply Comments at 3; ITS America Reply Comments at 2; NENA Comments at 2.

[82] *See* AT&T Comments at 3; NATOA *et al.* Comments at iii; NAEMT Comments at 2; PSST Comments at 4-5; *See also* Cellular South Comments at 2; Ericsson Comments at 3-4; NPSTC Comments at 7 (describing public/private partnership as "the only reasoned course to meet this challenge given the lack of any funding to deploy the system."); Sprint Nextel Comments at 10 ("public/private partnerships have been shown to be an effective means of galvanizing resources in the telecommunications and technology industries to meet critical needs in the public sector.").

[83] *See*, *e.g.*, NATOA *et al.* Comments at iii. *See also id.* at 7 ("Congress has made it clear that government funding . . . is not possible"); APCO Reply Comments at 3 ("the Commission cannot make policy decisions based on a "hope and prayer" that Congress will act.").

[84] *See* AT&T Comments at 4; Cellular South Comments at 2; NATOA *et al.* Comments at 8; *see also* PSST Comments at 5-6.

[85] AT&T Comments at 2-3. *See also* IMSA *et al.* Reply Comments at 6; PSST Comments at 6.

the public/private partnership condition on the D Block.[86] They argue, among other things, that because of the high incremental cost of constructing a network to public safety specifications and build-out requirements, the network cannot be commercially viable without government funding.[87] They further argue that this problem is exacerbated by aspects of the 700 MHz Public/Private Partnership that make it difficult or impossible to determine revenue potential, and by the difficulty raising capital in the current economic environment. Several commenters argue that while the Commission might reduce the public safety-related requirements sufficient to permit commercial viability, this would defeat the public safety purpose of the network.[88]

49. Some commenters also argue that the Commission needs to address the unmet commercial needs of small and regional carriers for unencumbered spectrum suitable for advanced broadband services and that this demand can best be met by the D Block.[89] Based on this concern, for example, MetroPCS recommends that the Commission auction the D Block unencumbered and "seek congressional action to have the proceeds of such auction be used by the public safety community to build the network it needs."[90]

50. Some public safety entities oppose the public/private partnership out of concern that the commercial incentives of the D Block licensee are inconsistent with its obligation to meet public safety needs. These commenters assert that, due in part to a lack of confidence in the network, and in some cases to the availability of local alternatives, local public safety entities will not use the network, and will therefore receive no benefit from the 700 MHz public safety broadband spectrum.[91] These commenters propose that, instead of using the public safety broadband spectrum in the 700 MHz Public/Private Partnership, the Commission should provide public safety entities direct access to the spectrum in order to

[86] IAFF Comments at 1; King County Comments at 1-3; MetroPCS Comments at 5-6; Motorola Comments at 5-7; NYPD Comments at 3-5; RTG Comments at ii; San Francisco Comments at 2-4; Verizon Wireless Comments at 7-11; Rivada Reply Comments at 1-2, 4-5.

[87] *See*, *e.g.* Motorola Comments at i, 2, 7, 9 (significant build-out and operating costs "will dramatically affect the ability of the D-Block licensee(s) to compete effectively with other commercial services on price" and that "further direction, legislative action, and funding are needed from Congress to ensure that first responders have the necessary resources to deploy a broadband video and data network"); King County Comments at 2 ; NYPD Comments at 3 ("there is simply no business case for a commercial wireless network operator to build a nationwide network that will meet public safety coverage and survivability standards."); RPC 9 Comments at 3; San Francisco Comments at 7; Verizon Wireless Comments at 7-8. *See also* Motorola Reply Comments at 2.

[88] Motorola Comments at 5; NYPD Reply Comments at 4-5; Verizon Wireless Comments at 8; Verizon Wireless Reply Comments at 1. *See also* MetroPCS Comments at 14. *Cf.* ITS America Reply Comments at 3 ("additional funding from Congress to cover the incremental costs of a Public Safety network compared to that of a commercial network is likely to be required.").

[89] *See* MetroPCS Comments at 9-11; RTG Comments at 4-5.

[90] MetroPCS Comments at 6, 9-11. *See also* RTG Comments at 4; CTIA Reply Comments at 2-3, 5. MetroPCS also argues that certain aspects of the 700 MHz Public/Private Partnership, including the requirement of commercial access to public safety spectrum on a secondary basis and of public safety access to commercial spectrum in emergencies, may violate Section 337 of the Communications Act. *See* MetroPCS Comments at 14-16. We address these legal issues in our discussion of spectrum use in the shared wireless broadband network.

[91] NYPD Comments at 3 (asserting that public safety agencies in New York City have "little incentive . . . to pay subscriber fees to access a nationwide public/private broadband network" because a municipal public safety broadband data network will be fully deployed by the end of 2008); San Francisco Comments at 2-3; *see also id.* at 2 (describing results of a partnership requirement as "an uncertain auction, a vague network sharing agreement, an untested network, and the prospect that many local public safety agencies could choose not to participate"); RTG Comments at 2.

build out their own separate networks.[92] AT&T, Verizon Wireless, and others support a public-private partnership but argue that a Request for Proposal process is a better alternative for accomplishing this goal than a reauction of the spectrum.[93] Specifically, AT&T and Verizon propose a process in which the Commission would reallocate the D Block spectrum to the PSBL, who in turn would use the RFP process to select a lessee or lessees to build a shared network.[94] Verizon Wireless also proposes an alternative RFP process in which the Commission would "auction the spectrum on an unencumbered basis and give the proceeds to public safety to support the deployment of interoperable communications solutions."[95] The public safety licensee would, in turn, use an RFP process to establish a partnership with a commercial provider (presumably through some leasing arrangement).[96]

51. Discussion. We tentatively conclude that we should continue to require, as a license condition, that the D Block licensee enter into a public/private partnership with the Public Safety Broadband Licensee for the purpose of constructing a shared wireless broadband network that will provide interoperable broadband service to public safety entities. Throughout this proceeding, we have sought to promote nationwide access by public safety agencies to interoperable broadband wireless services operating over a modern, IP-based system architecture. We have further sought to achieve certain ancillary goals, such as ensuring the robustness and survivability of the public safety broadband system as well as promoting cost and spectrum efficiency.[97] Achieving these public safety goals remains very much in the public interest. We have noted previously the many potential benefits of broadband service to public safety,[98] and the record in this proceeding confirms the growing importance of broadband communications to public safety efforts.[99] We find that achieving a nationwide level of interoperability among and between public safety communications systems and devices so that public safety entities can communicate and coordinate their activities, particularly in response to emergencies, remains a critical imperative.[100] After considering the results of Auction 73 and the record in this

[92] San Francisco Comments at 2; King County Comments at 2-3; NYPD Comments at 5-8. *See also* NYPD Comments at 7, 10; Philadelphia Comments, *generally* (arguing that local governments should have a right to "opt-out" of the nationwide network and construct an independent network in the public safety broadband spectrum"); TDC Comments at 3; Rivada Reply Comments at 1,2, 4.

[93] *See, e.g.,* AT&T Comments at 2.

[94] *See* AT&T Comments at 6; Verizon Wireless Comments at 21, n.33.

[95] Verizon Wireless Comments at 21, n.33.

[96] *Id.* (indicating that the public safety licensee could either use its existing allocation for the partnership, or the Commission could reallocate the D Block to public safety and license it to public safety licensee).

[97] *See 700 MHz Ninth Public Safety Notice*, 21 FCC Rcd at 14842-43 ¶¶ 12-18; *Second Report and Order*, 22 FCC Rcd at 15431 ¶¶ 396-97; *Second Further Notice*, 23 FCC Rcd at 8051-52 ¶ 6.

[98] *See 700 MHz Ninth Public Safety Notice*, 21 FCC Rcd at 14842 ¶ 12 ("police officers could exchange mug shots, fingerprints, photographic identification, and enforcement records; firefighters could have access to floor and building plans and real-time medical information; forensic experts could provide high resolution photographs of crime scenes and real-time video monitoring transmitted to incident command centers.").

[99] *See*, *e.g.*, NAEMT Comments at 2 ("EMS communication's future is broadband. To save time in life-threatening situations, it will become essential to use technologies now in development to send data in addition to voice communications."); *see also* Ericsson Comments at 3; NPSTC Comments at 6; PSST Comments at 4; Testimony of Robert M. Gurss, Director, Legal & Government Affairs, Association Of Public-Safety Communications Officials-International, Inc., July 30, 2008, http://www.fcc.gov/realaudio/presentations/2008/073008/gurss.pdf ("Broadband video, high speed images, Internet access, and data of an endless variety would greatly enhance the ability of police, fire, EMS and other personnel to protect the public and respond to emergencies.").

[100] *See*, *e.g.*, Cellular South Comments at 1; PSST Comments at 4; SIEC Comments at 1. *See also* AASHTO Comments at 7 ("Without a single network using a common technology as its basis, our nation's emergency (continued….)

proceeding, we tentatively conclude that a mandatory public/private partnership between the licensee or licensees of the D Block and the licensee of the public safety broadband spectrum (which we will again refer to as the "700 MHz Public/Private Partnership") remains the best option available to us to achieve these goals.

52. We continue to find that, as a regulatory approach for promoting the development of a nationwide, interoperable broadband network for public safety, the basic construct of the 700 MHz Public/Private Partnership model has a number of benefits. As we stated in the *Second Report and Order*, the use of a shared infrastructure for both commercial and public safety services will enable a significant cost savings in the construction of the network.[101] Further, making the construction and operation of this network a license condition will help to promote development of public safety network with access on a nationwide basis, lead to economies of scale in network infrastructure and equipment, and provide a regulatory framework for ensuring construction on a timely basis. In addition, by providing the commercial partner with secondary preemptible access to the public safety spectrum and providing public safety limited priority access to the commercial spectrum in times of emergency, the 700 MHz Public/Private Partnership furthers the important public interest goal of maximizing efficient and intensive spectrum use,[102] without compromising safety or commercial feasibility, resulting in a total net benefit to public safety and commercial entities. This approach may also serve important commercial interests, such as promoting the availability of broadband services to remote areas.

53. Most importantly, we find that the 700 MHz Public/Private Partnership remains the only means, in the absence of legislative appropriations, of obtaining funding for the construction of a network or networks to provide public safety with nationwide, interoperable broadband service. The record in this proceeding confirms the limited availability of public funding for the construction of a public safety broadband network, and the importance of the 700 MHz Public/Private Partnership as a means to promote commercial investment for that purpose.[103] We note that several commenters have argued that the public safety community's need for such funding is best addressed by additional government appropriations instead of through commercial investment.[104] While we agree that government funding would be a solution, we are not aware of any current appropriations for such networks, and certainly none sufficient to provide access on the scale addressed by the 700 MHz Public/Private Partnership proposal. Similarly, Congress has not authorized the Commission to use 700 MHz auction funds for network construction. Therefore, so long as there is a reasonable likelihood of success with the 700 MHz Public/Private Partnership approach, we decline to abandon this course in favor of a speculative approach that relies on government funding that may not materialize.

54. We are also not persuaded to rely solely on local and state entities to build out their own networks in the 700 MHz public safety broadband spectrum as a substitute for construction by mandatory public/private partnerships. Although a few jurisdictions such as New York City have determined to use

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response and disaster relief workers will continue to be hampered in their ability to respond to any call for assistance in the wake of a natural or man caused situation.").

[101] *See, e.g.*, *Second Report and Order*, 22 FCC Rcd at ¶ 396.

[102] *See*, *e.g.*, 47 U.S.C. §§ 151, 309(j)(3)(D).

[103] *See* NAEMT Comments at 2 ("No other proposal for a national public safety broadband system has suggested how to fund it other than the FCC's public/private partnership concept"); *see also* ACT Comments at 1; AT&T Comments at 3; NATOA Comments at 21; PSST Comments at 4-5; Sprint Nextel Comments at 10 ("public/private partnerships have been shown to be an effective means of galvanizing resources in the telecommunications and technology industries to meet critical needs in the public sector.").

[104] *See*, *e.g.*, MetroPCS Comments at 6; Motorola Comments at 5-6; RTG Comments at 3, n.3. *See also* Verizon Wireless Comments at 30 n.52. *Cf.* Florida Region 9 Comments at 3 ("Without Federal funding we believe any public/private partnership will fail the requirements of the PSST.").

commercial service providers to satisfy their wireless broadband needs, none of these jurisdictions have stated that these networks provide anything more than commercial-grade service, or that they were able to achieve the economies of scale and nationwide interoperability inherent in the 700 MHz Public/Private Partnership approach. As more and more public safety agencies take advantage of the benefits of broadband applications, we are concerned that in the end we will again end up with balkanized networks incapable of even minimum interoperability.[105] Again, when faced with future calamities, the Nation will continue to suffer from the same dangerous shortcomings that were encountered following natural and man-made disasters of the past because there will remain no dedicated public safety spectrum with a nationwide level of interoperability. We also remain concerned that, due to the funding issues discussed above, such local or regional efforts will occur only in a few jurisdictions, leaving most of the country's public safety community without wireless broadband for the foreseeable future. In contrast, the 700 MHz Public/Private Partnership rules proposed herein will provide a plan to provide broadband coverage for public safety entities on a significantly more expanded basis than individual agreements with commercial service providers or build-out by individual jurisdictions in the 700 MHz broadband spectrum could achieve.

55. As noted above, some commenters have argued that, whatever benefits the 700 MHz Public/Private Partnership might possess, the model cannot be made commercially viable except by reductions in the network design and coverage requirements that would sacrifice its suitability as a public safety network. We recognize that, for the 700 MHz Public/Private Partnership to achieve the objectives of this proceeding, it must meet the essential requirements of public safety communications systems and also provide a level of commercial viability sufficient to encourage investor participation and to permit long-term commercial success in a competitive environment. We also acknowledge that there is some tension between these goals. To the extent that the network is required to meet higher standards for reliability, hardening, security, and other features than are being implemented in competing commercial broadband networks, and to build out in commercially unprofitable areas, such costs will pose an additional challenge to the commercial viability of the network. We also note that the financial challenges posed by the construction and operation of the shared wireless broadband network may be exacerbated by the prevailing condition of the nation's economy overall and its impact on the availability of capital.[106]

56. Based on the record before us, however, we tentatively conclude that it is possible to establish requirements that are commercially viable while still meeting the essential requirements of public safety first responders. First, we anticipate that a part, although likely not all, of the incremental cost of meeting public safety specifications and construction will be accounted for in the discounted price of the auctioned D Block spectrum.[107] In addition, we find that certain reductions or modifications of the requirements in the existing rules are consistent with the Commission's fundamental public safety

[105] We note that existing rules permit local jurisdictions to construct independent networks operating over the 700 MHz public safety broadband spectrum, with certain limitations and conditions, in the event that the shared wireless broadband network is not scheduled to cover the relevant jurisdiction by the end of the D Block license term. *See* 47 C.F.R. § 27.1330(b)(5). In addition, these rules provide local jurisdictions with a method, again with certain conditions, to construct a network prior to the anticipated construction date of the shared wireless broadband network in that jurisdiction, subject to later integration. *See id.* As discussed elsewhere, we tentatively conclude that we should retain these rules.

[106] *See* Council Tree Comments at ii.

[107] *See* APCO Comments at 37. *But see* Verizon Wireless Comments at 8 ("the D Block and public safety broadband spectrum are not worth nearly enough to offset the massive cost of building a national broadband network to the mission-critical specifications of public safety . . . even if the D Block were given away for free," and estimating the incremental costs of hardening and build-out beyond commercial footprints at over $20 billion). *See also* APCO Comments at 37.

objectives, and will significantly improve the commercial viability of the 700 MHz Public/Private Partnership, thus enhancing the likelihood that public safety users will in fact receive the benefits we seek to achieve in this proceeding. We also expect that, to some extent, additional public safety-related requirements should provide some degree of market advantage, particularly to public safety users and others, such as critical infrastructure users.[108] We note that despite our tentative conclusion that entities such as critical infrastructure users are not eligible for service as public safety users, they may still receive service as customers of the D Block licensee(s).[109]

57. We do find that many of the specific problems noted by commenters regarding the existing rules governing 700 MHz Public/Private Partnership present legitimate concerns. We tentatively conclude that these issues can be successfully addressed, however, through appropriate rule modifications. On the commercial side, we agree, for example, that for potential bidders to make an informed determination regarding the viability of the partnership, they must have reasonable certainty and clarity regarding their obligations under the rules, and thus, the likely costs of constructing and operating the shared wireless broadband network. They also need to have some ability to predict the revenue potential of the shared wireless broadband network. While we may not have provided sufficient certainty on either of these factors under the existing rules, we are persuaded that it is possible to provide such certainty. Conversely, regarding certain public safety objections that the commercial D Block licensee will not adequately serve their interests, we find that appropriate oversight measures, including reporting requirements, can address these concerns. Accordingly, in the sections below, we address these issues in greater detail and reach tentative conclusions regarding how best to implement the 700 MHz Public/Private Partnership to respond to these concerns.

58. Though we tentatively conclude that we should retain the public/private partnership and assign commercial licenses for the D Block by competitive bidding, we also seek comment on whether assigning licenses through a Request for Proposal (RFP) process would increase the likelihood of successfully deploying a nationwide interoperable broadband network useable by public safety. We seek comments on both a detailed proposal for how the RFP process would be conducted, as well as why it would be superior to an auction of licenses consistent with the rules proposed herein. We seek comment as well on whether any RFP process would be consistent with the Commission's obligations under Sections 309(j) and 337(a) with respect to the allocation of spectrum and the method of assigning D Block licenses.

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[108] *See*, *e.g.* SouthernLINC Reply Comments at ii, 4 (noting that, "given its hardened network and best of class design, public safety agencies throughout SouthernLINC's territory have relied on SouthernLINC for day-to-day and emergency operations since the network became operational in 1995," and that nearly one-quarter of its customer base is comprised of "federal, state, and local agencies"). *But see* Motorola Comments at 4-5 (stating that the number of first responders is "insufficient . . . to amortize the high costs associated with hardening the network and constructing infrastructure covering over 99.3 percent of the U.S. population.").

[109] We note that the record provides some evidence indicating that networks have already been constructed that are both suitable for public safety use and commercially viable. SouthernLINC, for example, notes that since 1995, it has operated a commercial network "specifically designed to withstand the stressful weather conditions caused by hurricanes in the Southeast," with features "far more robust than a traditionally-designed, commercial-grade network designed with some additional redundancy." SouthernLINC Reply Comments at 3-4; *but see id.* at 4 ("[a] true public-private partnership can work, but it is not easy, and the Commission should recognize that this proceeding may not be the right vehicle to make it happen"). In addition, PGCC, after reviewing the results of a project to construct a Wi-Fi network over a 30-mile corridor in Arizona for public safety and other users, concluded that the "experience supports the FCC position proposing to use D-Block and the adjacent Public Safety spectrum for nationwide broadband connectivity with commercial ownership subject to Public Safety constraints." PGCC Comments at 11.

B. Service Rules for the D Block Licensee and the 700 MHz Public/Private Partnership

1. Geographic Area for D Block License

59. Background. In the *Second Report and Order*, we determined that the D Block license would be auctioned as a single, nationwide license.[110] In the *Second Further Notice*, we revisited this decision, in part, because no bidder matched the reserve price the Commission set for the D Block license.[111] In addition to asking if we should retain the single, nationwide license approach, we proposed authorizing the D Block among multiple licensees and asked several questions related to such a proposal. We asked what size the license areas should be if the D Block were split into regional licenses? For instance, should the blocks be Regional Economic Area Groups (REAGs), Economic Areas (EAs), or Cellular Market Areas (CMAs)?[112] We also sought comment on whether the D Block should be split into one license (or several licenses) covering high-population density areas and a second license (or set of licenses) covering low-population density areas.[113] We further sought comment on whether we should modify any of the policies or rules previously adopted or proposed with respect to a D Block 700 MHz Public/Private Partnership to ensure that the primary goal of a national, interoperable, communications network for public safety agencies is not jeopardized.[114]

60. Commenters offer divergent views on whether the Commission should maintain the single, nationwide, license approach or allocate the D Block through multiple, smaller, regional licenses. Sprint Nextel, Rural Cellular Association (RCA), Ericsson, Inc. (Ericsson), the PSST, the Association of Public Safety Communications Officials (APCO), National Public Safety Telecommunications Council (NPSTC), and most public safety organizations prefer the single, nationwide license approach because, they contend, it should present the most cost effective approach to designing a broadband network that achieves interoperability and connectivity across geographic regions on a nationwide basis.[115] Some commenters object to regional licensing on grounds that some or even many regions might go unsold at auction, resulting in checkerboard coverage.[116] NPSTC argues that integrating regional networks would present technical and logistical challenges and could take years to implement.[117]

61. A number of commenters, however, favor a regional approach. AT&T, Verizon Wireless, and smaller regional service providers, such as MetroPCS, United States Cellular Corporation US Cellular and Rural Telecommunications Group (RTG), prefer the multiple, regional license approach

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[110] *Second Report and Order*, 22 FCC Rcd at 15420 ¶ 369.

[111] *Second Further Notice*, 23 FCC Rcd 8047, 8048-49 ¶ 1.

[112] *Second Further Notice*, 23 FCC Rcd at 8111-12 ¶ 183.

[113] *Second Further Notice*, 23 FCC Rcd at 8112 ¶ 185.

[114] *Second Further Notice*, 23 FCC Rcd at 8112 ¶ 184.

[115] APCO Comments at 40; see also, International Municipal Signal Association, International Association of Fire Chiefs, Inc., Congressional Fire Services Institute, and Forestry Conservation Communications Association (IMSA et al.) Comments at 12; National Association of Telecommunications Officers and Advisors, National Association of Counties, National League of Cities, and U.S. Conference of Majors (NATOA, et al.,) Comments at 17; National Public Safety Telecommunications Council (NPSTC) Reply Comments at 9; Region 33, 700 MHz Planning Committee (Region 33) Comments at 19-21; Virginia Fire Chiefs Association (VFCA) Comments at 3; Rural Cellular Association (RCA) Comments at 2; Sprint Nextel Comments at 11; Public Safety Spectrum Trust Corporation (PSST) Reply Comments at 12; Testimony of Chief Harlin R. McEwen**,** Chairman, PSST FCC *En Banc* Hearing, New York, July 30, 2008 at 2; Ericsson Comments at 34; Council Tree Reply Comments at 13; Intelligent Transportation Society of America (ITS America) Reply Comments at 3.

[116] *See e.g.* APCO Comments at 40.

[117] NPSTC Reply Comments at 10.

for the D Block because, among other reasons, regional licenses would permit participation by smaller providers, who may be unable to compete on a nationwide scale, but may have the resources to build regional networks that could be leveraged to rapidly deploy a nationwide system.[118] US Cellular recommends that the Commission adopt geographic areas that align with the "55 National Public Safety Planning Advisory Committee ("NPSPAC") regions."[119] US Cellular argues that these regions are of similar size to MEAs and "with over two decades of experience in meeting the wireless needs of state and local public safety authorities through [NPSPAC] regional committees operating pursuant to a national plan and FCC order, there are also distinct advantages in aligning D Block licenses with the NPSPAC."[120] US Cellular and RTG also contend that smaller license areas could lead to more rapid deployment of public safety communications networks in rural areas.[121]

62. TeleCommUnity, a national association of local governments, and Charlotte, North Carolina, Houston, Texas, and Montgomery County, Maryland (TeleCommUnity), contends that there are strong arguments for allocating regional licenses, for the D Block, as well as the single, nationwide license approach.[122] The New York City Police Department (NYPD) and the City of Philadelphia (Philadelphia) contend that the Commission should adopt an approach that permits local public safety agencies to develop their networks that would then interconnect with other local public safety agencies.[123] These entities argue that a single, nationwide license could impede the development of their local public safety networks.[124] Coverage Co. and Space Data Corp. ask the Commission to adopt an approach that assigns one license for urban or more populated areas and another license for rural or less populated areas.[125] Other entities, such as Google and Qualcomm, do not appear to favor a single, nationwide license or a multiple regional license approach. They are more concerned that the Commission establishes a public safety broadband network that is interoperable as soon as practicable.[126]

63. Discussion. We tentatively conclude that we should offer the D Block at auction as both a single, nationwide license and as regional licenses. We propose that the regional geographic areas would be comprised of the 55 700 MHz RPC regions,[127] and three additional regions, and to refer to these

[118] AT&T Comments at 24-25; Verizon Wireless Comments at 29-31; Verizon Wireless Reply Comments at 11; MetroPCS Comments at 20; US Cellular Comments at i, 15-16; RTG Comments at ii, 1; NTCH Comments at 9-10; Testimony of William J. Andrle, Jr. Northrop Grumman Information Technology FCC *En Banc* Hearing, New York, July 30, 2008 at 2.

[119] US Cellular Comments at 2. US Cellular later made an *ex parte* presentation in which it argued that the Commission should license the D Block through geographic areas that followed state geographical boundaries. *See* Letter from Warren G. Lavey, on behalf of US Cellular, to Marlene H. Dortch, Secretary, WT Docket No. 06-150, filed Aug. 29, 2008, Attachment at 3.

[120] US Cellular Comments at i. *See also* AT&T Reply Comments at 9; City of Philadelphia Reply Comments at 6-7 & nn. 13, 16.

[121] RTG Comments at ii, 4; US Cellular Comments at 2.

[122] TeleCommUnity Comments at 13-14.

[123] NYPD Reply Comments at 4-5; Philadelphia Reply Comments at 8.

[124] NYPD Reply Comments at 7-14; Philadelphia Reply Comments at 5-8.

[125] Coverage Co. Comments at 2; Space Data Corp. Comments at 2-3, 12.

[126] Google Comments at 3; Qualcomm Comments at 8.

[127] Although some commenters propose the use of NPSPAC regions for licensing, we tentatively find it more appropriate to use the Regional Planning Committee (RPC) regions, which are largely but not entirely identical. We note that the NPSPAC regions were established in connection with the 800 MHz public safety spectrum. The term "NPSPAC" is an acronym for the National Public Safety Planning Advisory Committee, which was established by (continued….)

58 regions as PSRs for D Block licensing purposes.[128] The three additional regions will cover (1) the Gulf of Mexico; (2) the Territory of Guam (Guam) and the Commonwealth of Northern Mariana Islands (Northern Mariana Islands); and (3) the Territory of American Samoa (American Samoa), and will be identical to the current Economic Area (EA) licensing areas for those same regions.

64. As we explain further below, we find that both nationwide and PSR area licenses have advantages that could help achieve the public interest goal of establishing a commercially viable interoperable public safety broadband network on a nationwide basis. Further, while offering the D Block on a regional basis raises the risk of unsold areas, offering only a single, nationwide license may increase the risk that there are no bids on the D Block spectrum at all. Accordingly, to provide the greatest likelihood of success in offering new licenses for the D Block spectrum with a public/private partnership condition, we propose to permit entities to bid on both nationwide and regional licensing options and to allow auction results to determine on which geographic area basis the D Block will ultimately be licensed pursuant to auction rules and procedures that we explain elsewhere in this Third Further Notice.

65. *Nationwide Option.* We tentatively conclude that one of the D Block geographic license area options that parties should be able to bid upon is a single, nationwide license. We propose to offer a nationwide D Block license because the record in this proceeding reaffirms that the Commission can achieve its goals for the public safety broadband network through this type of license.[129] In particular, one of the Commission's primary goals for the authorization of the D Block is to "address a vitally important problem: promoting interoperability, on a nationwide basis, for public safety communications."[130] The record in response to the *Second Further Notice* supports the Commission's

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the Commission in 1986 to advise the Commission on rules for the 821-824 MHz/866-869 MHz band. *See* Amendment of Parts 2 and 22 of the Commission's Rules Relative to Cellular Communications Systems Amendment of Parts 2, 15, and 90 of the Commission's Rules and Regulations to Allocate Frequencies in the 900 MHz Reserve Band for Private Land Mobile Use Amendment of Parts 2, 22 and 25 of the Commission's Rules to Allocate Spectrum for, and to Establish Other Rules and Policies Pertaining to the Use of Radio Frequencies in a Land Mobile Satellite Service for the Provision of Various Common Carrier Services, GEN Docket No. 84-1231 RM-4812, GEN Docket No. 84-1233 RM-4829, GEN Docket No. 84-1234, *Report and Order,* 2 FCC Rcd at 1825 ¶ 46 (1986). The 821-824 MHz/866-869 MHz band was eventually licensed on a regional basis with the resulting regions designated as NPSPAC regions. However, the initial rules governing the 700 MHz public safety spectrum, which included the regional approach governing a portion of that spectrum, were established in a separate proceeding. *See* Development of Operational, Technical and Spectrum Requirements For Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, WT Docket No. 96-86, *First Report and Order and Third Notice of Proposed Rulemaking*, 14 FCC Rcd 152 (1998) (*700 MHz Public Safety First Report and Order and Third Notice*). We tentatively find that the 700 MHz regions are the more appropriate regional basis to use in the instant proceeding. As noted above, the 700 MHz regions are almost, but not quite, identical to the 800 MHz NPSPAC regions. Although the NPSPAC regional boundaries were used as the initial basis for the 700 MHz public safety regions, *see id.* at 263, Appendix D (List of Regions), two of the regions have since been modified. *See* Public Notice, "Public Safety 700 MHz Band – General Use Channels Approval of Changes to Regional Planning Boundaries of Michigan and Connecticut," 16 FCC Rcd 16359 (2001). Our proposal would thus license the D Block in accordance with these regional boundaries as modified for Connecticut and Michigan. As for terminology, because the NPSPAC was not involved in the 700 MHz proceeding, it would be a misnomer to identify these 700 MHz geographic areas as NPSPAC regions. It is more accurate to refer to the regions as RPC regions because the spectrum allocation in these areas is governed by the RPCs. *See* 47 C.F.R. § 90.531.

[128] *See* Appendix A.

[129] *Second Report and Order*, 22 FCC Rcd at 15420 ¶ 369. Thus, the license will cover the 50 states, the Gulf of Mexico, and the territories.

[130] *Second Further Notice*, 23 FCC Rcd at 8051 ¶ 5; *see also Second Report and Order*, 22 FCC Rcd at 15419 ¶ 365. In addition, in the *700 MHz Public Safety Eighth Notice* adopted in March 2006, the Commission emphasized its commitment "to ensuring that emergency first responders have access to reliable and interoperable (continued….)

previous determination that interoperability is a critical need for the public safety broadband network and that assigning the D Block to a single, nationwide licensee may help to facilitate achieving nationwide interoperability both within and between jurisdictions. We note that the majority of public safety agencies assert that a single, nationwide license is the best way to achieve an interoperable network.[131] Although we tentatively find that it is possible to achieve interoperability between regional networks, a nationwide license would likely simplify the task of ensuring interoperability and avoid problems in its implementation. For example, it would eliminate the need for technology coordination, roaming arrangements, and interconnection arrangements between different regional networks.

66. Licensing the D Block on a nationwide basis could also help to achieve the other goals that the Commission has for the public safety broadband network, *i.e.*, that it be cost effective, spectrally efficient, flexible and employ an advanced IP-based network.[132] A single, nationwide license may provide opportunities for cost savings through elimination of redundant equipment (*e.g.,* mobile base station deployments in the event of natural disasters), processes (billing, etc.) or staff (*e.g.,* public safety support), and greater economies of scale for network equipment or handsets.[133] These cost savings might enhance the ability of the D Block licensee to rapidly build the public safety broadband network in rural, expensive-to-serve, less populated areas. We therefore tentatively conclude that the economies of scale that a commercial entity could achieve through a single, nationwide license could promote the rapid deployment of an advanced nationwide public safety broadband network.

67. In addition, a single, nationwide license could facilitate coordination between the D Block licensee, the Public Safety Broadband Licensee, and the public safety agencies that use the network. As discussed elsewhere in this Third Further Notice, the public/private partnership concept requires the D Block licensee to establish an NSA with the Public Safety Broadband Licensee and, thereafter, coordinate with the Public Safety Broadband Licensee to ensure that the network effectively serves the interests of the public safety community. The coordination scheme envisioned for the D Block could be particularly efficient if there were only one licensee required to coordinate and negotiate with the Public Safety Broadband Licensee and local public safety agencies.

68. Some wireless service providers argue that the single, nationwide license will not work because, in their opinion, no single entity would find it commercially viable to develop a nationwide public safety communications network with the technical requirements and other rules that the Commission had imposed, in the *Second Report and Order*, on the D Block.[134] As we discuss in more detail, elsewhere, we have made substantial changes to the technical specifications and performance requirements that should help make the single, nationwide license more commercially viable. These policies should ease the burdens on a single, nationwide D Block licensee.

69. *Public Safety Region Option.* We tentatively conclude that we should revise our rules to also provide the option of regional geographic area licensing of the D Block on the basis of 58 PSRs, 55 regions of which would correspond to the 55 RPC regions, and which would include three additional regions covering (1) the Gulf of Mexico; (2) Guam and the Northern Mariana Islands; and (3) American

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communications." *700 MHz Public Safety Eighth Notice*, 21 FCC Rcd at 3682 ¶ 31; *see also*, *Second Further Notice*, 23 FCC Rcd at 8051 ¶ 4; *Second Report and Order*, 22 FCC Rcd at 15420 ¶ 369; *700 MHz Further Notice*, 22 FCC Rcd at 8156 ¶ 253.

[131] *See*, *e.g.*, APCO Comments at 40; IMSA et al. Comments at 12; NATOA, et al. Comments at 10.

[132] *Second Report and Order*, 22 FCC Rcd at 15420 ¶ 369.

[133] *See Second Report and Order*, 22 FCC Rcd at 15298, 15324 ¶¶ 20, 82 (explaining how larger geographic service areas permit service providers to establish economies of scale).

[134] AT&T Comments at 7-8; Verizon Wireless Comments at 7-8, 24-31.

Samoa.[135] As we explain further below, PSR licensees could lead to a rapid deployment of the public safety broadband network that is tailored to respond to the public safety communications needs of particular regions.

70. Our proposal to permit licensing of the D Block on a regional basis is based on several factors. Section 309(j) of the Communications Act instructs that, in designing competitive bidding systems, the Commission should consider the dissemination of licenses among a wide variety of applicants when that consideration would serve the public interest.[136] Regional licensing could allow smaller commercial entities that do not have the resources to acquire a nationwide license and meet nationwide performance requirements to participate in bidding for D Block licenses, thereby increasing the chances of a successful public/private partnership for at least the majority of the nation. In addition, regional licensing could lead to enhanced build-out and faster deployment to less populated, rural areas. Those entities interested in a larger geographic footprint can bid on, and if successful, aggregate multiple PSR regional licenses. The record in response to the *Second Further Notice* demonstrates that nearly all nationwide carriers and several regional carriers, which filed comments, support licensing on a regional basis.[137] As we explain elsewhere, in order to ensure that authorizing the D Block through multiple, regional licenses will achieve nationwide interoperability, we have proposed roaming and certain other interoperability requirements for D Block licenses. In order to reduce the possibility that regional licensing of the D Block might result in large areas that are unserved by the public safety broadband network, we tentatively conclude that an auction of the D Block spectrum must result in winning D Block license bidders with licenses covering at least 50 percent of the nationwide population or the results of the auction will be void.[138]

71. In addition, regional D Block licensees could be particularly responsive to the unique needs of state, regional, and local public safety agencies. Regional licensees could coordinate with local public safety entities and ensure that public safety communications are tailored to meet unique local needs in particular geographic areas. PSR licensees may, for example, take into account regional differences in terrain and public safety needs in determining how to set up and operate the system, which could be more cost effective in certain respects and better suited to regional needs than a one-size fits-all system. PSR licenses may also be more desirable because the assignment of a single, nationwide, D Block license may increase risks of disruption for public safety entities in the event the single nationwide operator is commercially unsuccessful. Having regional licensees, with license areas mostly following state jurisdictional boundaries, may also address certain concerns in the record that the development of the nationwide public safety broadband network should not impede the existing networks that some local agencies have spent substantial resources deploying.[139]

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[135] *See* Appendix A.

[136] 47 U.S.C. § 309(j)(3)(B); Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, *First Report and Order*, 15 FCC Rcd 476, 500 ¶ 57 (2000).

[137] AT&T, Inc., (AT&T) Comments at 24-25; Verizon Wireless Comments at 29-31; Verizon Wireless Reply Comments at 11; Metro PCS Comments at 20; US Cellular Comments at i, 15-16; Rural Telecommunications Group, Inc. (RTG) Comments at ii, 1; NTCH, Inc., (NTCH) Comments at 9-10; Testimony of William J. Andrle, Jr. Northrop Grumman Information Technology FCC *En Banc* Hearing, New York, July 30, 2008 at 2. Among the carriers offering nationwide service plans, who filed comments in this proceeding, only Sprint Nextel supports nationwide licensing. *See* Sprint Nextel Comments at 11.

[138] *See* Letter from Warren G. Lavey, on behalf of US Cellular, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 06-150, filed July 28, 2008, Attachment at 9 (suggesting that the Commission should set a minimum population threshold in determining if the auction results for the D Block should stand).

[139] *See*, *generally*, District Comments; *see also* Prepared Testimony of John J. Farmer, Former Attorney General, New Jersey; Senior Counsel, 9/11 Commission, at 3, FCC *En Banc* Hearing (July 30, 2008).

72. Assigning the D Block through PSR licenses that are geographically aligned with the 55 RPC regions could further enhance the responsiveness of the PSR licensees to the public safety communications needs of their specific geographic regions and facilitate the development of an interoperable public safety broadband network. The Commission created the RPC regions for 700 MHz public safety general use spectrum to maximize the efficiency of public safety's use of this spectrum and to foster the accommodation of a wide variety of localized public safety communications requirements in different areas of the Nation. Creating regional D Block licenses whose boundaries correspond with those of the RPC regions should facilitate interaction between the PSR licensees and the existing RPCs. We anticipate that these regional entities have considerable institutional knowledge about the communications needs and concerns of public safety entities within their jurisdictions. PSR licensees could coordinate with them for their respective licensing area to learn about any public safety communications challenges or needs that might be specific to the particular region. RPCs might also help the Public Safety Broadband Licensee and PSR licensees negotiate the build-out schedule, fees, and other terms of their respective NSAs that would be tailored for a particular PSR region. RPCs could also share with PSR licensees approaches towards establishing inter-regional interoperability that have been more successful than others.[140]

73. *License Partitioning and Disaggregation.* We tentatively conclude that it would not serve the public interest to change the current rule governing D Block partitioning and disaggregation, and thus to continue prohibiting any partitioning and disaggregation of a D Block license. We seek comment on this conclusion.

74. *Other Geographic Area Proposals.* We tentatively conclude that it would not serve the public interest to split the D Block into one license for a high-population density area and a second license covering low-population density, rural areas, as Coverage Co. and Space Data request.[141] Coverage Co. and Space Data's proposals do not specify the boundaries of the geographic areas that the two licenses would cover, which could present uncertainties for potential bidders and lead to disputes. In addition, there is a substantial question about the commercial viability of these two-license approaches. Coverage Co. and Space Data do not appear to argue, and the arguments they make do not demonstrate, that their two-license proposals are more commercially viable than the regional approach we propose. Also, the record does not indicate that commenters, other than Coverage Co. and Space Data, support these specific two-license proposals. Based on the record and the unique characteristics of this proceeding, such as the important obligations of the public/private partnership licensees, the Commission would need a stronger record, before deciding that it should adopt a geographic area licensing scheme that is significantly different from the schemes the Commission has employed in the past.[142]

75. Finally, we tentatively conclude that it would not serve the public interest to offer license areas that are smaller than PSRs in the reauction of the D Block. Although the record indicates that some

[140] *See* AT&T Reply Comments at 9 (arguing that, if the Public/Private Partnership is able to take advantage of the organizational structure already in place among the RPCs, "the RPCs will facilitate interoperability and coordination between adjacent regions and public safety agencies, while ensuring that local public safety users have a voice in the design and functionality of the services offered over the network.").

[141] Coverage Co. Comments at 2; Space Data Comments at 2, 13-15; Space Data Reply Comments at 2. Coverage Co. is a provider of software-defined radio (SDR) technology services and it claims that its technology would allow a commercial wireless network to operate on both CDMA and GSM systems. Coverage Co. Comments at 4-5. Space Data uses a "balloon-based 'near space' communications system" to provide "wireless services in the South Central United States." Space Data Comments at 4.

[142] Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, *Twelfth Report*, 23 F.C.C.R. 2241, 2286 ¶ 97 (2008) ("*Twelfth Report*").

entities have an interest in the Commission assigning the D Block by offering 493 BTAs,[143] 176 EAs,[144] and 736 CMA licenses,[145] smaller license areas may make it more difficult to achieve nationwide interoperability. Assigning hundreds of smaller license areas could also exacerbate coordination issues that might arise among the D Block licensees, the Public Safety Broadband Licensee, and public safety agencies that would be involved with the policies and operation of the network. Moreover, license areas smaller than the PSRs might increase the possibility that some license blocks will not be sold in the reauction.

2. Requirements for the Shared Wireless Broadband Network

a. Spectrum Use Issues

(i) Combined Spectrum Use

76. Background. In the *Second Report and Order*, we determined that promoting commercial investment in the build-out of a shared network infrastructure for both commercial and public safety users through the 700 MHz Public/Private Partnership would address "the most significant obstacle to constructing a public safety network—the limited availability of public funding."[146] We concluded that providing for a shared infrastructure using the D Block and the public safety broadband spectrum would help achieve significant cost efficiencies, allow public safety agencies to take advantage of off-the-shelf technology, provide the public safety community with access to an additional 10 megahertz of broadband spectrum during emergencies, and provide the most practical means of speeding deployment of a nationwide, interoperable, broadband network for public safety service by providing all of these benefits on a nationwide basis.[147] At the same time, we pointed out that the 700 MHz Public/Private Partnership would provide the D Block licensee with rights to operate commercial services in the 10 megahertz of public safety broadband spectrum on a secondary, preemptible basis, which would both help to defray the costs of build-out and ensure that the spectrum is used efficiently.[148]

77. In the *Second Further Notice*, we sought comment on whether, to provide the D Block licensee with appropriate flexibility to achieve an efficient and effective implementation of the 700 MHz Public/Private Partnership obligations, we should amend the rules to clarify that the D Block licensee may construct and operate the shared wireless broadband network using the entire 20 megahertz of D Block spectrum and public safety broadband spectrum as a combined, blended resource.[149] In particular, we sought comment on whether, in designing and operating the shared network, the 10 megahertz of D Block spectrum and the 10 megahertz of public safety broadband spectrum may be combined, in effect, into a

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[143] AT&T Comments at 24 (recommending EAs and CMAs as options for the geographic area license); Coleman Bazelon Comments at 24 (CMA licenses); RTG Comments at ii, 5 (requesting CMAs); Wirefree Comments at 12-14 (requesting CMAs); NTCH Comments at 11 (requesting BTAs); *see also*, In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, *Fifth Report*, FCC 08-88, 2008 WL 2404499 (rel. June 12, 2008), at ¶ 52 (indicating there are 493 BTAs).

[144] *See* "Auction of 700 MHz Band Licenses Scheduled for January 16, 2008; Comment Sought on Competitive Bidding Procedures For Auction 73," *Public Notice*, FCC Rcd 15004 (WTB 2007) (indicating there are 176 EAs).

[145] *See* "Auction of 700 MHz Band Licenses Scheduled for January 16, 2008; Comment Sought on Competitive Bidding Procedures For Auction 73," *Public Notice*, FCC Rcd 15004 (WTB 2007) (indicating there are 736 CMAs).

[146] *Second Report and Order*, 22 FCC Rcd at 15431¶ 396.

[147] *Id*.

[148] *Id*.

[149] *Second Further Notice*, 23 FCC Rcd at 8077 ¶ 80.

single and integrated 20 megahertz pool of fungible spectrum.[150] This pool of spectrum could then be assigned to users without regard to whether a public safety user is being assigned frequencies in the D Block or a commercial user is being assigned frequencies in the public safety broadband spectrum.[151] These assignments would be permissible so long as the network provides commercial and public safety users with service that is consistent with the respective capacity and priority rights of the D Block license and Public Safety Broadband License and with our rules.[152] We sought comment on whether permitting the combined use of spectrum in this fashion would provide for a more efficient and effective use of spectrum.[153] We also sought comment on whether such a combined use would be consistent with the different rights and obligations associated with the D Block license and the Public Safety Broadband License and whether it would be in the public interest to allow such use.[154] We asked whether permitting such combined use would be consistent with the requirements of Sections 337(a) and (f) and the Commission rules allotting specific frequencies for use by the Public Safety Broadband Licensee and the D Block licensee.[155]

78. Comments. In response to *Second Further Notice*, we received broad support for clarifying that the D Block licensee may construct and operate the shared wireless broadband network using the entire 20 megahertz of D Block spectrum and public safety broadband spectrum as a combined, blended resource.[156] These commenters note that allowing the combined flexible use of spectrum will promote efficient use of the spectrum and make the D Block license more commercially attractive while facilitating priority access and preemption.[157] Supporters of this approach included members of the public safety community.[158] In addition, Google and Alcatel Lucent note that this approach is consistent with the Communications Act.[159]

79. Discussion. Based on the record, we tentatively conclude that a D Block licensee may construct and operate the shared wireless broadband network using the entire 20 megahertz of D Block spectrum and public safety spectrum as a combined, blended resource. That 20 megahertz of spectrum may be assigned to users without regard to whether a public safety user is assigned frequencies in the D Block or a commercial user is assigned frequencies in the public safety broadband spectrum, so long as 50 percent of the capacity available from the combined 20 megahertz of spectrum is assigned to the public safety users and the other 50 percent to the commercial users, consistent with the respective capacity and priority rights of the D Block license and the Public Safety Broadband License and with our rules.[160]

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[150] *Id.*

[151] *Id.*

[152] *Id.*

[153] *Id.* at 8077 ¶ 81.

[154] *Id.*

[155] *Id.*

[156] ALU Comments at 8-9; Google Comments at 4-5; Ericsson Comments at 17, 24 n.56; Hypres Comments at 7; Motorola Comments at 10-11; SouthernLINC Reply Comments at 9-10. *But see* TE M/A-COM Comments at 8 (arguing against a combined network).

[157] *See* ALU Comments at 8; Google Comments at 4-5; Ericsson Comments at 24 n.56.

[158] NRPC Comments at 6; APCO Comments at 27.

[159] Google Comments at 4-5; ALU Comments at 8-9.

[160] *Second Further Notice*, 23 FCC Rcd at 8077 ¶ 80.

80. We agree with the commenters[161] who conclude that permitting the combined use of spectrum in this fashion provides for a more efficient and effective use of spectrum and provides further flexibility for a D Block licensee to use all available wireless broadband technologies to build and operate the network and thus promote our ultimate goal of making available a nationwide interoperable broadband network for public safety users. If given the flexibility of undivided spectrum, a D Block licensee can use the best available network management technologies to allocate and prioritize users efficiently across the full 20 megahertz of spectrum,[162] thereby increasing throughput and capacity over what can be achieved with two separate 10 megahertz networks.[163] Further, we expect that by focusing its resources on a blended network design rather than a network that must carefully segregate different services into separate frequency bands, a D Block licensee should also be able to conserve costs. This improved flexibility, efficiency, and cost should make the license more attractive to potential bidders.[164]

(ii) Priority Public Safety Access to Commercial Spectrum During Emergencies

81. Background. In the *Second Report and Order*, we required the D Block licensee to provide the Public Safety Broadband Licensee with priority access during emergencies to the spectrum associated with the D Block license (in addition to the 700 MHz public safety broadband spectrum).[165]

82. In the *Second Further Notice*, we sought comment on whether we should continue to require the D Block licensee to provide the Public Safety Broadband Licensee with priority access during emergencies to the spectrum associated with the D Block license.[166] We invited comment on whether this obligation is essential to ensure that the network capacity will meet public safety wireless broadband needs.[167] We asked, alternatively, whether removing the obligation could significantly improve the chances that this proceeding will succeed in achieving our goal of making available to public safety users a nationwide, interoperable, broadband network that incorporates the greater levels of availability, robustness, security, and other features required for public safety services.[168] We sought further comment on whether, if we continue to require that the D Block licensee provide the Public Safety Broadband Licensee with priority access during emergencies to the spectrum associated with the D Block license, we should provide more clarity on the circumstances that would constitute an "emergency" for this purpose.[169]

83. Comments. In response to *Second Further Notice*, we received comments generally supporting the idea of providing public safety entities with some additional spectrum capacity for emergency needs,[170] but parties diverged on the extent of such access. While the public safety

[161] ALU Comments at 8; Google Comments at 4-5; NRPC Comments at 6; Ericsson Comments at 17-18; Hypres Comments at 7; SouthernLINC Reply Comments at 9-10.

[162] *See* ALU Comments at 8.

[163] *See* Ericsson Comments at 17.

[164] *See* Google Comments at 4; SouthernLINC Reply Comments at 9-10.

[165] *Second Report and Order*, 22 FCC Rcd at 15441-42 ¶¶ 426-27.

[166] *Second Further Notice*, 23 FCC Rcd at 8079 ¶ 85.

[167] *Id.*

[168] *Id.*

[169] *Id.* at 8079-80 ¶ 86.

[170] PSST Comments at 32; Seybold Comments at 2-3; RPC 33 Comments at 10; AASHTO Comments at 13; NATOA *et al.* Comments at iv; SDR Forum Comments at 10, 16; PGCC Comments at 12; Televate Comments at 11; NTCH Comments at 4; AT&T Reply Comments at 18; NPSTC Comments at 12; Ericsson Comments at 25; (continued….)

community generally agrees that public safety users should have at least some priority access in emergencies to the spectrum associated with the D Block,[171] they are divided on whether geographic and time limits should be established.[172] PSST argues that "public safety priority access during emergency situations should be limited to 70% of total network capacity [or 40% of the D Block capacity] and that public safety preemption rights should not exceed 50% of the network capacity."[173] APCO proposes avoiding the difficulties in defining the contours of emergency priority access by allowing both public safety and commercial users to take advantage of any available channels in the combined 20 megahertz spectrum when traffic is low, but restricting each set of users to 10 megahertz during periods of high traffic.[174] APCO argues that public safety users should have priority access to all 20 megahertz only in rare circumstances.[175] We note that several commenters suggest the possibility of using technology to dynamically prioritize signals throughout the network.[176]

84. Other commenters argue that unlimited emergency priority access to the capacity set aside for commercial use would undermine the commercial viability of the network and the success of the Public/Private Partnership.[177] AT&T and Alcatel-Lucent recommend that we model that priority access after the Department of Homeland Security's Wireless Priority Service,[178] which allows government officials to contract with CMRS providers for priority telecommunications services.[179] With regard to

(Continued from previous page)
NATOA *et al.* Reply Comments at 11; Verizon Wireless Reply Comments at 7; *But see* Bazelon Comments at 1-2, 22 (arguing that a priority access requirement would inappropriately diminish the value of the D Block for commercial entities, thereby reducing the likelihood of a winning bid as well as proceeds to use to support a public safety network).

[171] PSST Comments at 32; Seybold Comments at 2-3; RPC 33 Comments at 10; AASHTO Comments at 13; NATOA et al. Comments at iv; SDR Forum Comments at 10, 16; PGCC Comments at 12; Televate Comments at 11; NTCH Comments at 4; AT&T Reply Comments at 18; NPSTC Comments at 12; Ericsson Comments at 25; NATOA et al. Reply Comments at 11; Verizon Wireless Reply Comments at 7; *But see* Bazelon Comments at 1-2, 22 (arguing that a priority access requirement would inappropriately diminish the value of the D Block for commercial entities, thereby reducing the likelihood of a winning bid as well as proceeds to use to support a public safety network).

[172] *See* RPC 33 Comments at 17-18 (supporting limitations); Wireless RERC Comments at 12 (same). *But see* AASHTO Comments at 12-13 (noting that any limitations could hinder safety operations in the event of an emergency).

[173] PSST Reply Comments at ii, 7-8. PSST stated in it initial comments that "it is reasonable to limit priority access for public safety to 70% of overall network capacity of the SWBN, or just 40% of the D Block spectrum capacity." PSST Comments at 33.

[174] APCO Comments at 27-28. *But see* NATOA et al. Reply Comments at 11.

[175] APCO Comments at 27-28.

[176] SDR Forum Comments at 16, 25, 27; AT&T Comments at 13; NPSTC Comments at 47-48.

[177] Leap Wireless Comments at 13-14 (arguing argues that public safety users should be allowed priority access to only 50% of available network capacity, "with no other preemption requirements on the network"); Verizon Wireless Comments at 9 ("providing priority access to public safety users on a preemptive basis reduces the value of the network to their commercial counterparts"); Motorola Comments at 8; *but see* Sprint Nextel Comments at 14-15 (proposing that the D Block auction winner offer "near real-time prioritization," under which the D Block licensee moves "all commercial traffic off network within ten minutes of receiving a call from authorized public safety officials") *But see* Verizon Wireless Reply Comments at 7 (noting that reducing priority access to 50% of the network "would frustrate the very purpose of building a new dedicated public safety network.").

[178] *See* http://wps.ncs.gov/.

[179] AT&T Comments at 13; *see also* ALU Comments at 9-10; AT&T Reply Comments at 18 n.59.

geographic limitations, Ericsson argues "that priority access should be limited to specific geographic areas affected by serious emergencies, to avoid jeopardizing the commercial viability of the 700 MHz Public/Private Partnership, and that priority access should be properly limited to the area directly affected by the emergency."[180] As to bandwidth limitations, some propose that at least 50 percent of the capacity be prioritized for public safety use.[181]

85. Several commenters also argue that the Commission should define the specific circumstances that constitute an "emergency" before conducting an auction,[182] suggesting several methods to achieve this goal. Others argue that the parties should decide this issue for themselves,[183] and one commenter argues that emergencies should be declared only by senior levels of state or local government.[184] Some commenters agree that the specific situations listed in the *Second Further Notice*[185] could be considered an emergency.[186]

86. Discussion. Based on the record, we tentatively conclude that emergency access to the D Block commercial capacity should be mandated only in the event of an "emergency," as that term was defined in the *Second Further Notice*, specifically:

- The declaration of a state of emergency by the President or a state governor.
- The issuance of an evacuation order by the President or a state governor impacting areas of significant scope.
- The issuance by the National Weather Service of a hurricane or flood warning likely to impact a significant area.
- The occurrence of other major natural disasters, such as tornado strikes, tsunamis, earthquakes, or pandemics.
- The occurrence of manmade disasters or acts of terrorism of a substantial nature.
- The occurrence of power outages of significant duration and scope.

[180] Ericsson Comments at 23.

[181] Motorola Comments at 10. Ericsson further argues that "the priority access and preemption for public safety can be applied on the entire 20 MHz" and that "3GPP standards provide automatic methods for providing such priority access and preemption." Ericsson Comments at 24. *But see* CEA Comments at 3 ("the Commission should limit public safety's priority access to D Block spectrum in emergencies to 50 percent of the commercial D Block capacity.")

[182] *See* AT&T Comments at 13; Qualcomm Comments at 10-11; Google Comments at 6-7; NRPC Comments at 9-10; Bazelon Comments at 1; Wireless RERC Comments at 11; APCO Comments at 26. *But see* Leap Wireless Comments at 13-14. RPC 33 proposes that an emergency exists anytime lives or "significant property" are at risk, but that the decision should be made locally, rather than by a national board. RPC 33 Comments at 17.

[183] Qualcomm Comments at 10-11. Televate similarly argues that commercial bidders should submit before the auction proposals that state under what conditions they will allow priority access to their networks. Televate Comments at 11. NPSTC agrees that the Commission should define certain circumstances that would constitute an emergency "after consultation with the PSBL and D Block licensee, and in circumstances the PSBL has defined and Commission approves prior to the D Block auction." NPSTC Comments at 12-13.

[184] NPSTC Comments at 12-13.

[185] *See Second Further Notice*, 23 FCC Rcd at 8079-80 ¶ 86.

[186] Ericsson Comments at 23-24; California Comments at 6. The Wireless RERC urges, however, that the terms "significant" and "substantial," as used in the *Second Further Notice*, be further clarified or deleted from the descriptions of those situations. Wireless RERC Comments at 12.

- The elevation of the national threat level to either orange or red for any portion of the United States, or the elevation of the threat level in the airline sector or any portion thereof, to red.

87. We tentatively conclude that for the first two conditions and when the national or airline sector threat is set to red, the D Block licensee(s) must provide public safety users priority access[187] to, but not preemptive use of, up to 40 percent of the commercial D Block spectrum capacity (*i.e.*, 2 megahertz in each of the uplink and downlink blocks), assuming the full public safety broadband block spectrum capacity is being used, for an aggregate total of 14 megahertz of overall network capacity.[188] For all other emergencies listed above, the D Block licensee(s) must provide priority access to, but not preemptive use of, up to 20 percent of the commercial spectrum capacity (*i.e.*, 1 megahertz in each of the uplink and downlink blocks). Furthermore, under either scenario, the right to emergency-based priority access must be limited to the time and geographic scope of the emergency. To trigger emergency-based priority access, the PSBL will request, on behalf of the impacted public safety agencies, that the D Block licensee provide such access. Priority access requests initiated by the PSBL will cover a 24-hour time period, and must be reinitiated by the PSBL for each 24-hour time period thereafter that the priority access is required. In the event that the D Block licensee and the PSBL do not agree that an emergency has taken place, the PSBL may ask the Defense Commissioner to resolve the dispute.

88. We expect that the instances under which emergency-based priority access would be triggered under the definition we tentatively propose above will be relatively infrequent. Moreover, we agree generally with APCO that through responsible capacity management that permits public safety user groups to prioritize their regional and local use of the shared wireless broadband network, and which is embedded into the network prior to deployment, it will be possible to provide critical services using no more than the ten megahertz public safety portion of the shared wireless broadband network under virtually all but the rarest of circumstances.[189] At the same time, our proposed approach should continue to guarantee additional network capacity to meet public safety wireless broadband needs in the most serious emergencies. We note, for example, that both of the circumstances cited by the PSST – the events of September 11, 2001, and Hurricane Katrina – would have met the standard we propose.[190]

89. In light of the fact that we expect public safety use of the priority access mechanism to be infrequent, we believe we should not require public safety users of priority access to pay an additional charge to the D Block licensee for such use over and above the basic monthly service charge discussed

[187] To be clear, by "priority access," we mean that the public safety user would be assigned the next available channel over a commercial user—*i.e.*, the public safety user would be placed at the top of the queue—and would not preempt a commercial call in progress.

[188] *See* PSST Comments at iii, 16 n.28, 33 (explaining that "it is reasonable to limit priority access for public safety to 70% of overall network capacity of the SWBN, or just 40% of the D Block spectrum capacity."); PSST Reply Comments at ii ("public safety priority access during emergency situations should be limited to 70% of total network capacity and that public safety preemption rights should not exceed 50% of the network capacity.").

[189] *See* APCO Comments at 28-29. APCO recommended that in circumstances under which "sector loading increases and service contention starts to occur, there [should be] a[n] immediate transition to a hard partition state" where commercial and public safety use of the shared wireless broadband network would revert to 50% of the paired spectrum (*i.e.*, where commercial users accessed only the ten megahertz of D Block spectrum and public safety users accessed only the ten megahertz of public safety broadband spectrum). The only instances in which this "hard partition" would be removed, allowing public safety users priority access some portion of the commercial D Block spectrum, would be pursuant to Presidential Order or "by any other existing means where government can seize control of commercial assets – a situation that rarely occurs, and would not be a specific impact to the [National Broadband Network] any more than any other commercial asset." APCO Comments at 27.

[190] PSST Comments at 33. *See* "Declaration of National Emergency by Reason of Certain Terrorist Attacks," http://www.whitehouse.gov/news/releases/2001/09/20010914-4.html.

elsewhere in this Third Further Notice. Although we stated in the *Second Report and Order* that separate fees for priority access could be specified in the NSA,[191] we did so based on a broader definition of priority access than the one we propose now. For example, the *Second Report and Order* permitted public safety preemption of ongoing commercial traffic,[192] which we would no longer allow. We also have proposed more specific criteria for defining emergencies that would trigger priority access rights and limitations on the duration of priority access. We therefore seek comment on our view that separate fees for priority access should not be allowed, or whether a separate fee structure would be appropriate to ensure that the D Block licensee can recover its costs for providing priority access.

90. We also expect that our proposed approach will significantly improve the chances that this proceeding will succeed in achieving our goal of making a nationwide, interoperable, broadband network available to public safety users. We appreciate that, to be viable, the commercial services offered on the D Block spectrum must be competitive with other commercial mobile services. Commercial viability could be adversely impacted if users of a D Block licensee's commercial services perceive that their service may be preempted or unavailable at the times when they most need to use it, while competing providers offer uninterrupted services. In clarifying the circumstances that would constitute an emergency, requiring priority access rather than preemption, and providing that only a portion of the commercial capacity will be subject to public safety priority access even in emergencies, we seek to minimize any diminution of the commercial value of the D Block spectrum. We tentatively find that this approach offers the best opportunity to create a commercially viable network that can satisfy the demands of public safety users. We seek comment on this approach.

91. *Commercial Operations in the Public Safety Spectrum on a Secondary Basis.* While we propose to modify the rules governing public safety's emergency access to commercial spectrum, we tentatively conclude that our rules for commercial access to public safety spectrum should remain the same, subject to our clarification regarding combined/blended use. As we explain below, the spectrum access permitted here and the conditions placed on the use of the spectrum are designed to ensure that any commercial use does not undermine the "principal purpose" of the services provided in this band "to protect the safety of life, health, or property," as required by Section 337.[193] And as we determined in the *Second Report and Order*, commercial operations on a secondary, preemptible basis will maximize the efficient use of the spectrum by permitting full use of the public safety broadband spectrum.[194] Further, providing the D Block licensee with the opportunity to offer commercial services on this spectrum, on a secondary basis, is an integral part of a viable framework for enabling the 700 MHz Public/Private Partnership to finance the construction of a nationwide, interoperable public safety broadband network.

(iii) Consistency with Section 337 of the Communications Act

92. Background. Section 337 of the Communications Act, as amended, required the Commission to allocate, from the 746-806 MHz Band, 24 megahertz for public safety services and 36 megahertz for "commercial use to be assigned by competitive bidding pursuant to section 309(j)."[195] Some commenters suggest that rules that would permit public safety use of spectrum allocated for commercial use or commercial use of public safety spectrum on a secondary basis would violate these requirements.[196]

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[191] *Second Report and Order*, 22 FCC Rcd at 15448 ¶ 450.

[192] *Id.* at 15442 ¶ 428.

[193] 47 U.S.C. § 337(a)(1), (f)(1)(A).

[194] *Second Report and Order*, 22 FCC Rcd at 15437-38 ¶ 416.

[195] 47 U.S.C. § 337(a).

[196] *See*, *e.g.*, MetroPCS Comments at 14-16.

93. Discussion. In the *Second Report and Order*, we analyzed whether the 700 MHz Public/Private Partnership rules regarding the use of spectrum by the shared wireless broadband network were consistent with Section 337.[197] We found that Section 337(a)(1), requiring 24 megahertz for "public safety services," does not prohibit us from permitting commercial operations on a secondary basis to the 10 megahertz of the 700 MHz public safety spectrum to facilitate the build-out of a public safety network.[198] We further found that Section 337(a)(2), which directs us to allocate 36 megahertz "for commercial use," does not prohibit us from requiring the D Block licensee to provide public safety users with priority access to D Block license spectrum in an "emergency."[199] We continue to find our analysis of these issues in the *Second Report and Order* persuasive. Further, because we are not proposing to modify the rules regarding secondary commercial use of the public safety spectrum, our reasoning and conclusions in the *Second Report and Order* regarding such use apply to our secondary use proposal here as well. While we do propose to modify public safety access to commercial spectrum in emergencies, such modifications would only reduce or clarify the scope of the emergency access. Because our conclusion in the *Second Report and Order* that such access was consistent with Section 337 rested in part on a finding that "emergency access to commercial spectrum would be triggered only in rare circumstances," we find that the reasoning and conclusion applies even more strongly to the proposed emergency access rules. Accordingly, consistent with the *Second Report and Order*'s reasoning and conclusions, we conclude that our proposals regarding commercial use of public safety spectrum on a secondary, preemptible basis and public safety priority use of commercial spectrum capacity are consistent with the requirements of Section 337.

94. We find that our proposal to permit the D Block licensee to construct and operate the shared wireless broadband network using the entire 20 megahertz of D Block spectrum and public safety spectrum as a combined, blended resource is also consistent with Section 337. We note that Section 337(a)(1) provides us the authority to allocate 24 megahertz for public safety services "according to the terms and conditions established by the Commission."[200] We have stated previously that "this phrase . . . afford[s] us broad discretion to impose conditions on the use of this spectrum to effectuate its optimal use by public safety . . . ."[201] We conclude that permitting a blended use approach does in fact serve this purpose, given our finding above that blended use can provide a more efficient and effective use of the combined spectrum resource and thus promote our ultimate goal of making available an interoperable broadband network for public safety users nationwide. Indeed, given our conclusion that a 700 MHz network providing for shared use of commercial and public safety spectrum is itself legally permissible, we find it unlikely that Congress intended to preclude an efficient implementation of such sharing. We emphasize that, under a blended use approach, public safety users will still be guaranteed priority access to 10 megahertz of 700 MHz spectrum at all times consistent with the capacity to which they are entitled under the public safety broadband license. The blended use approach does not deprive either commercial or public safety users of the spectrum capacity that Congress directed to be allocated for their use, and is thus consistent with both the purpose and text of the statute.

b. Technical Requirements of the Shared Wireless Broadband Network

95. Background. In the *Second Report and Order*, we found that, to ensure a successful

[197] *See Second Report and Order*, 22 FCC Rcd at 15436-43 ¶¶ 412-430.

[198] *See id.* at 15437-41 ¶¶ 413-25.

[199] *See id.* at 15442 ¶ 429. We also found that imposing the 700 MHz Public/Private Partnership condition on the D Block did not prevent us from auctioning the license and was therefore consistent with the mandate under Section 337 that the spectrum be auctioned pursuant to Section 309(j). *See id.* at 15442-43 ¶ 430.

[200] 47 U.S.C. § 337(a)(1).

[201] *Second Report and Order*, 22 FCC Rcd at 14339 ¶ 419.

public/private partnership between the D Block licensee and the Public Safety Broadband Licensee, with a shared nationwide interoperable broadband network infrastructure that meets the needs of public safety, we must adopt certain technical network requirements.[202] Accordingly, among other requirements, we mandated that the network incorporate the following technical specifications:

- Specifications for a broadband technology platform that provides mobile voice, video, and data capability that is seamlessly interoperable across agencies, jurisdictions, and geographic areas. The platform should also include current and evolving state-of-the-art technologies reasonably made available in the commercial marketplace with features beneficial to the public safety community (*e.g.*, increased bandwidth).
- Sufficient signal coverage to ensure reliable operation throughout the service area consistent with typical public safety communications systems (*i.e.*, 99.7 percent or better reliability).
- Sufficient robustness to meet the reliability and performance requirements of public safety. To meet this standard, network specifications must include features such as hardening of transmission facilities and antenna towers to withstand harsh weather and disaster conditions, and backup power sufficient to maintain operations for an extended period of time.
- Sufficient capacity to meet the needs of public safety, particularly during emergency and disaster situations, so that public safety applications are not degraded (*i.e.*, increased blockage rates and/or transmission times or reduced data speeds) during periods of heavy usage. In considering this requirement, we expect the network to employ spectrum efficient techniques, such as frequency reuse and sectorized or adaptive antennas.
- Security and encryption consistent with state-of-the-art technologies.[203]

96. We required that the parties determine more specifically what these technical specifications would be and implement them through the NSA. In addition, we required that the parties determine and implement other detailed specifications of the network that the D Block licensee would construct.[204] We determined that allowing the parties to specify details, including the technologies that would be used, subject to approval by the Commission, would provide the parties with flexibility to evaluate the cost and performance of all available solutions while ensuring that the shared wireless broadband network has all the capabilities and attributes needed for a public safety broadband network.[205]

97. In the *Second Further Notice*, we sought comment on whether we should clarify or modify any aspect of the technical network requirements adopted in the *Second Report and Order* or otherwise establish with more detail the technical requirements of the network.[206] To guide the discussion and enable more focused comment, we attached as an appendix a possible technical framework ("Technical Appendix") that identified in greater detail potential technical parameters for the shared wireless broadband network. We sought detailed comment on the Technical Appendix.

98. We also sought comment on whether any changes to requirements were needed to reflect the practical differences between the architecture of traditional local wireless public safety systems and the architecture of nationwide commercial broadband network systems.[207] Conversely, we sought

[202] *Second Report and Order*, 22 FCC Rcd at 15433 ¶ 405.

[203] *Id.*

[204] *Id.* at 15434 ¶ 406.

[205] *Id.* at 15426 ¶ 383.

[206] *Second Further Notice*, 23 FCC Rcd at 8071 ¶ 61.

[207] *Second Further Notice*, 23 FCC Rcd at 8072 ¶ 64.

comment on whether to require national standardization in the implementation of the network requirements, and the extent to which national standardization would help the network to achieve efficiency and economies of scale and scope.[208]

99. Further, we sought comments on other specifications we required of the network, including:

- A mechanism to automatically prioritize public safety communications over commercial uses on a real-time basis and to assign the highest priority to communications involving safety of life and property and homeland security consistent with the requirements adopted in the *Second Report and Order*;
- Operational capabilities consistent with features and requirements specified by the Public Safety Broadband Licensee that are typical of current and evolving state-of-the-art public safety systems (such as connection to the PSTN, push-to-talk, one-to-one and one-to-many communications, etc.);
- Operational control of the network by the Public Safety Broadband Licensee to the extent necessary to ensure public safety requirements are met; and
- A requirement to make available at least one handset that would be suitable for public safety use and include an integrated satellite solution, rendering the handset capable of operating both on the 700 MHz public safety spectrum and on satellite frequencies.[209]

100. We sought comment on whether the Commission should itself establish, in a detailed and comprehensive fashion, the technical obligations of the D Block licensee with regard to the network, and if so, what specifications it should adopt. We sought comment on whether the technical framework set forth in the Technical Appendix could, following comment on its specific components, help establish an appropriate set of requirements for the shared wireless broadband network.[210] We also sought comment on a number of particular technical issues.[211]

101. The majority of commenters argue that the Commission should provide more specificity regarding technical network requirements. APCO, for example, recommends that "all steps be taken to either pre-define or eliminate as many negotiating points of the NSA as possible."[212] AT&T states that the Commission must "clarify the key requirements for the public safety network and the rights and responsibilities for all parties to the Public/Private Partnership ..."and that making such clarifications will "inform commercial entities about potential risks, benefits, and required amounts of financial investment, which will enable commercial entities to evaluate the commercial viability of the Public/Private Partnership."[213] The PSST agrees that "a substantially more detailed list of technical specifications should be developed in advance of the D Block re-auction."[214] It states that, on balance, "the benefit of greater certainty for prospective bidders outweighs the natural inclination of parties to maintain maximum flexibility during a negotiation process, particularly one of such complexity and economic

[208] *Second Further Notice*, 23 FCC Rcd at 8072 ¶ 64.

[209] *Second Report and Order*, 22 FCC Rcd. at 15433-34 ¶ 405.

[210] *Second Further Notice*, 23 FCC Rcd at 8074 ¶ 70.

[211] *Second Further Notice*, 23 FCC Rcd at 8074-79 ¶¶ 71-83.

[212] APCO Comments at 26.

[213] AT&T Comments at 9.

[214] PSST Comments at 29.

significance."[215] The PSST provides proposed rules that include detailed technical requirements for the shared wireless broadband network.[216]

102. Discussion. We note that several technical issues, such as network coverage, prioritization of services, and operational control of the network are addressed elsewhere in this notice. In this section, we specifically address requirements pertaining to: the broadband technology platform; interoperability; availability, robustness and hardening of the network; capacity, throughput and quality of service; security and encryption; power limits/power flux density limits/related notification and coordination requirements; and the satellite-capable handset requirement.

103. Based on the record developed in this proceeding, we tentatively conclude that we should establish more detailed technical requirements for the shared wireless broadband network. We tentatively conclude that this approach will provide additional certainty regarding the obligations of the D Block licensee(s) and the costs of the shared wireless broadband network. We anticipate that specifying the technical requirements as completely as possible at this time, and reducing the issues that will be left to post auction negotiation, will provide greater assurance to potential bidders regarding the commercial viability of the shared wireless broadband network while ensuring that the network meets public safety's needs.[217] Thus, we tentatively conclude that the detailed technical requirements we propose to adopt as described herein would best serve the Commission's goal of making a broadband, interoperable network available on a nationwide basis to public safety entities. We seek comment on these tentative conclusions.

104. As noted earlier, a number of commercial interests assert that the costs associated with deploying a shared network designed to public safety specifications would exceed those of typical commercial networks and would directly impact the commercial viability of the network.[218] They maintain that simply building another commercial grade network will be inadequate to meet public safety needs, and that it is imperative that the wireless broadband network be designed to meet the performance requirements of public safety and to provide the necessary features and applications so that public safety can effectively discharge their duties. Many of the commenters from the public safety community argue that public safety's requirements must not be diminished in order to make the shared wireless broadband network commercially viable. Motorola suggests that it is not possible to balance the interests of public safety and commercial service providers and that additional funding from the Federal government is required to make the combined network successful.[219] APCO supports the development of a national, interoperable, broadband network that is designed, maintained, and operated to meet the requirements of public safety, but recognizes that some compromises regarding public safety requirements may be necessary to attract a private sector partner through the D Block auction.[220] In developing our proposed technical rules, we have attempted to balance public safety's requirements with the capabilities that may be commercially viable based on the record in this proceeding. The proposed technical requirements take into account the detailed technical requirements proposed by the PSST and comments filed in response to the *Second Further Notice* and Technical Appendix.

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[215] PSST Comments at 29.

[216] Addendum to PSST Comments.

[217] We have appended an NSA term sheet, which provides a summary of major terms that the parties must include in their agreement(s). *See* Appendix E.

[218] AT&T Comments at 2; MetroPCS Comments at 5; Motorola Comments at 7-9; Sprint Nextel Comments at 13; Verizon Wireless Comments at 3.

[219] Motorola Comments at 7.

[220] APCO Comments at 6.

105. *Broadband Technology Platform*. Many commenters argue that the Commission should adopt guidelines specifying that the joint network must be built with state-of-the-art, commercially available, standards-based technology.[221] For example, AT&T argues that the baseline guidelines should be sufficiently flexible to permit the use of existing commercial technology, where such components meet public safety's capability requirements.[222] We agree with commenters that maximizing the use of commercially available technology can substantially increase the speed and decrease the cost of deployment of the network.[223] In addition, it is also likely to significantly reduce the costs of end user devices for first responders. Moreover, by permitting the leveraging of existing commercial network infrastructure, the shared wireless broadband network will be able to be built out more efficiently, thus making participation in the Partnership more attractive to commercial entities.[224] Thus, based on these considerations, we tentatively conclude that the network should utilize standardized commercial technologies. We further propose that the broadband platform must be IP-based and should also include current and evolving state-of-the-art technologies reasonably made available in the commercial marketplace with features beneficial to the public safety community.

106. We tentatively conclude that the shared wireless broadband network must provide for fixed and mobile voice, video, and data capability. Some parties indicate that certain applications, such as fixed video surveillance and fixed point-to-point and point-to-multipoint services, could use substantial capacity in the network and should use other spectrum. Alcatel-Lucent notes, for example, that "because video is likely the public safety application with the highest data rate requirements, care must be taken to ensure that support of video across the service area provide public safety with mission-critical operational capabilities without compromising the economic viability of the public/private partnership."[225] Stagg Newman argues that applications such as streaming video could consume much of the capacity of a network and would have a dramatic effect on the cost of the network.[226] Other commenters, such as Tyco Electronics, argue that the Commission should "afford public safety agencies maximum flexibility in the use of D Block Spectrum."[227] We appreciate the concern that certain applications could have a significant impact on network design and costs. However, we find that any effort to prohibit certain types of applications would be counterproductive to encouraging development and use of the shared wireless broadband network. We note that emerging networks and technologies are capable of accommodating a wide variety of services. We expect that the operators and users of the shared wireless broadband network will make reasonable judgments as to the applications that will run on the network and will adapt the network to meet evolving requirements. We invite comment on this tentative conclusion.

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[221] *See* PSST Comments, Attachment C at 2; AT&T Reply Comments at 18 (citing Ericsson Comments at 9-15; Interisle Comments at 11; Motorola Comments at 7; NATOA Comments at 9 and Technical Report Attachment; Northrop Grumman Comments at 6-7; Qualcomm Comments at 8-10; Verizon Wireless Comments at 16-18; Wireless RERC Comments at 7-8).

[222] AT&T Reply Comments at 18.

[223] AT&T Comments at 10; Ericsson Comments at 14-15; Verizon Wireless Comments at 16-18; AT&T Reply Comments at 18.

[224] AT&T Reply Comments at 18-19.

[225] ALU Comments at 6.

[226] *See*, *e.g.*, Testimony of Stagg Newman, Public Hearing on Public Safety Interoperable Communications - The 700 MHz Band Proceeding , Federal Communications Commission, July 30, 2008, at 2, http://www.fcc.gov/realaudio/presentations/2008/073008/newman.pdf. (estimating that increase in cell edge speed from 300 kbps/75 kbps downlink/uplink to 1.2 Mbps/512 kbps downlink/uplink, combined with a requirement of inbuilding coverage, would require 2 to 4 times the number of cellsites,at a construction cost of $200,000 to $500,000 and annual operating cost of $50,000 to $100,000 for each cellsite).

[227] Tyco Comments at 7.

107. We note that a variety of commenters – including public safety and commercial entities – assert that the D Block licensee should take the lead role in choosing the underlying technology of the network, in cooperation with the Public Safety Broadband Licensee and according to minimum specifications set by the Commission.[228] We disagree with commenters who argue that the Commission should make a specific choice of technology. In view of these commenters' differing opinions regarding the most appropriate technology,[229] there does not appear to be a basis for a determination regarding the viability of any particular technology for shared network at this time. Thus, we tentatively conclude that the public interest would be better served by allowing certain flexibility to parties interested in the D Block to make a determination regarding the technology for the network.

108. We tentatively conclude, however, that the shared wireless broadband network must use a common air interface to ensure nationwide interoperability as discussed elsewhere in this notice. We propose that the air interface be selected in a manner that provides interested parties as much flexibility and control as possible in the choice, and with the ability to bid on a license with the confidence regarding what technology will be applicable. We note that the record supports a conclusion that two next generation technologies in particular, WiMAX and LTE, provide the most likely options to provide the necessary broadband level of wireless service to public safety entities.[230] In light of these goals and observations, we propose to adopt two approaches with regard to determining the common broadband technology, tailored to whether the Commission assigns a nationwide licensee or regional licensees. In the event of a nationwide licensee, because there is no concern that different entities will seek to adopt different broadband radio access network technologies, we propose to allow the D Block license winner complete authority and discretion to choose its broadband technology after winning the license. In the event of regional licensees, however, we find that permitting them to choose their own technology would run an unacceptable risk of the licensees choosing different technologies, or being otherwise unable to agree on a technology. Further, we recognize that it would be problematic for the Commission itself to establish a common technology post-auction, as parties will likely consider the broadband technology a critical element of their business plans and an important factor in determining whether to bid for a license. Accordingly, to enable the selection of a single broadband technology standard that will apply to all regional licensees, we propose to use the auctions process itself. More specifically, we tentatively conclude that we will offer three alternative sets of licenses: regional licenses conditioned on the use of WiMAX technology and regional licenses conditioned on the use of LTE technology, as well as the third set of a single nationwide license. The bidder(s) for the set covering the greatest aggregate population at the close of bidding (with ties between sets broken by which of the tied sets received the highest gross bids in the aggregate) will become the provisionally winning bidder(s) and determine whether the Commission will grant the nationwide license, the WiMAX PSR licenses, or the LTE PSR licenses, subject to post-bidding application of a minimum sale requirement and all other conditions of the licensing process established by Commission rules, including those specific to the D Block. We discuss this process in greater detail elsewhere in this Third Further Notice. We seek comment on our proposed determinations regarding the radio access technology platform for the shared network.

109. We are cognizant that wireless broadband networks have already been deployed in the 700 MHz public safety spectrum in certain areas. We do not wish to disrupt existing operations that represent substantial investments and are working well to serve local public needs. We invite comment as to what steps, if any, should be taken with regard to such systems that may ultimately not be compatible

[228] AT&T Reply Comments at 18 (citing Leap Wireless Comments at 12-13; NPSTC Comments at 39; NTCH Comments at 7; RPC 33 Comments at 13-14; Comments of Wirefree Partners III, LLC at 14-15).

[229] *See* Comcentric Comments at 5; Qualcomm Comments at 8; MSV Comments at 21; MSUA Comments at 22; Space Data Corp. Comments at 8-9; SDR Comments at 23-24; Ericsson Comments at 10, 13-14.

[230] *See*, *e.g.*, InterIsle Comments at 2 ("there is much to be gained by leveraging CMRS technology on behalf of Public Safety users. Technologies such as WiMAX and especially LTE are very promising . . . .").

with the nationwide shared wireless broadband network technology. For example, should we require use or availability of multi-band radios that could be available to public safety first responders that may need to come into these areas in times of emergency? If so, how could this be implemented and in what timeframe?

110. *Interoperability*. We tentatively conclude that the network must provide voice, video, and data capabilities that are interoperable across agencies, jurisdictions, and geographic areas. By interoperable, we mean that the technology, equipment, applications, and frequencies employed will allow all participating public safety entities, whether on the same network or on different regional 700 MHz public safety broadband networks, to communicate with one another regardless of whether they are communicating from their home networks or have roamed on to another regional network. To achieve this level of interoperability, we tentatively conclude that, as discussed in detail above, the shared wireless broadband network must use a common air interface.[231] We take note that certain parties assert that a nationwide common air interface is not necessary because most interoperability is conducted locally. However, in times of a crisis public safety agencies often provide assistance far beyond their typical areas of operation. We recognize that one solution is for the local public safety agencies to supply compatible equipment to public safety agencies that are coming from another area to provide assistance. Such an approach has significant drawbacks because it requires a significant supply of extra equipment at additional expense. We also note arguments that multiple air interfaces could be accommodated through the use of handsets that can operate over multiple broadband air-interfaces or through use of software defined radios, particularly at base stations. We are concerned, however, that such equipment comes at additional expense that would be borne by all public safety users. It is also not clear from the record when handsets able to work over all the broadband platforms chosen by the various licensees would be available. Further, if these multi-mode handsets were produced solely to serve the public safety broadband networks, the Public Safety Broadband Licensee would have less opportunity to equip first responders with off-the-shelf handsets that could be obtained at significantly less cost than customized public safety user devices. We solicit comment on our tentative conclusion that selection of a single air interface is necessary to ensure nationwide interoperability.

111. As discussed elsewhere, to achieve interoperability with respect to the geographic area option of PSRs, we tentatively conclude that we will offer at auction alternative sets of PSRs, each conditioned on the licensees' use of a particular technology platform. We further tentatively conclude that, in the event that there are multiple D Block licensees, each regional D Block license winner should be required to enter into arrangements both with the other D Block license winners and with the Public Safety Broadband Licensee as necessary to ensure interoperability between networks. We propose that such arrangements provide, at a minimum, that each D Block licensee will provide the ability to roam on its network to public safety users of all other 700 MHz public safety broadband networks.[232] We further propose that the NSA of each regional D Block licensee must specify that the licensee will provide public safety users of all other 700 MHz public safety regional networks with the ability to roam on its network, and should specify the relevant terms and conditions under which roaming is provided. However, to ensure that the broadband network supports public safety interoperability, we propose that D Block licensees should not be permitted to assess special roaming charges (over and above service fees charged for in-region use) in cases where public safety users require roaming for mutual aid or emergencies.

112. A number of commenters suggest that further clarity is needed with regard to the role of the shared wireless broadband network relative to interoperability with existing public safety networks. For example, some parties question whether the shared network was to be used for ensuring

[231] *See*, *e.g.*, NYPD Comments at 10 ("Regional interoperability can be achieved by adapting a common air interface and operating on a common frequency band.").

[232] We do not, however, propose to require that such roaming arrangements extend to commercial services.

interoperability with existing legacy public safety voice systems or just for users of this spectrum. APCO notes that, while the shared network will have capabilities for voice, data and video systems, existing public safety systems will be used well into the future.[233] We observe that considerable work has been done and is under way to ensure interoperability among existing public safety communications systems.

113. We expect that the shared wireless broadband network will ensure interoperability in a variety of ways. All public safety users that opt to use the shared wireless broadband network will have the capability to be interoperable because they will be using a common air interface. As a result, radios could be taken from one jurisdiction to another, such as occurs for disaster relief, and will have the ability to communicate with other public safety users in that area. Moreover, multi-band radios could be developed, although at some cost premium, that are capable of operating on both the shared wireless broadband network and other public safety frequency bands.

114. The shared wireless broadband network could also be integrated with other public safety communications systems via gateways and bridges, as already occurs for existing public safety systems operating across multiple frequency bands. In this regard, we believe it is important that we ensure that the shared wireless broadband network have the technical capability to support interconnection with public safety operations in public safety frequency bands other than the 700 MHz public safety spectrum broadband allocation.[234] Specifically, we mean to provide public safety with the opportunity to interconnect existing voice-based public safety communications systems operating in VHF, UHF, and narrowband 700 MHz and 800 MHz bands with the shared network(s). We therefore propose to require the D Block licensee(s) to publish IP-based specifications enabling public safety operations in other frequency bands to access the shared broadband network(s) via bridges and/or gateways. We further tentatively conclude to require the Upper 700 MHz D Block licensee to offer gateway-based access to the shared network(s) for a standard charge per user (meaning per public safety officer/individual), and propose that a fee of $7.50 per month may serve as an appropriate amount.[235] As seen in Table 1, we base this proposed fee on our survey of monthly rates for services approximating land mobile radio – including "walkie-talkie" and push-to-talk service – that are add-ons to basic monthly service plans and offered under standard government contracts to public safety users. We also propose that public safety users themselves bear the costs of the bridges and gateways, including installation and maintenance costs, because such equipment would essentially serve as an extension of existing public safety systems. Parties who suggest that the costs of gateways or bridges should be shared between the D Block licensee and the Public Safety Broadband Licensee should provide specific information as to the costs involved, rationale for sharing these costs, and formula for sharing the costs. We invite comment on these proposals.

Table 1. **Survey: Service Rates for Walkie Talkie/Push-To-Talk Service**

Contracting Entity/Authority	Wireless Operator	Service Plan	Monthly Service Rate
State of Florida	Verizon Wireless	Basic Push to Talk (Florida Plan)	$10.00[236]

[233] APCO Comments at 10.

[234] We intend to include voice service presently conducted on VHF, UHF.

[235] Any gateway–based access service necessarily assumes a public safety network in place providing radio coverage on the desired frequencies in the area of operation.

[236] State of Florida, Department of Management Services, Wireless Voice Services, State Term Contract #725-330-05-1, Amendment 4, available at http://dms.myflorida.com/business_operations/state_purchasing/vendor_information/state_contracts_agreements_and_price_lists/state_term_contracts/wireless_voice_services/contractors_verizon_wireless (last viewed on Sept. 11, 2008). The plan includes unlimited one to one and group Push to Talk calling.

Contracting Entity/Authority	Wireless Operator	Service Plan	Monthly Service Rate
State of New York	Verizon Wireless	America's Choice for Business Plan – Push to Talk Option	$8.10[237]
	Sprint Nextel	Unlimited Nextel Group Walkie-Talkie	$7.50[238]

115. We recognize that interoperability may not be fully achievable without attention to the use of compatible applications. As discussed elsewhere, the Public Safety Broadband Licensee is responsible for approving public safety applications and end user devices. Accordingly, we propose to clarify that in exercising this responsibility, the Public Safety Broadband Licensee must ensure that any applications and end users devices it approves must be consistent with the interoperability requirements contained in the Commission's rules and in accordance with the NSA. We invite comment as to the merits of this approach and any other methods to achieve interoperability among user applications. In particular, to promote interoperability, including interoperability with legacy voice systems, we propose to require the Shared Wireless Broadband Network to support a Voice over Internet Protocol (VoIP) capability to complement existing public safety mission critical voice communication systems.

116. If there are multiple regional D Block licensees, it may be necessary to establish a mechanism to enable public safety to coordinate with and establish common approaches among these licensees with regard to interconnection standards, compatibility with common applications, authentication, etc. We invite comment on whether the Commission needs to take any specific actions in this regard or it can be left to the various licensees.

117. *Availability, Robustness and Hardening.* Several commenters offer specific proposals regarding the robustness and hardening requirements for the network.[239] After reviewing the record, we have made a number of changes to the proposals in the Technical Appendix that are reflected in the proposed rules. We propose to require 99.6 percent network availability for all terrestrial elements of operation, as suggested by US Cellular. The D Block licensee(s) shall use commercially reasonable efforts to provide network availability above this requirement, with the target of 99.9 percent network availability. The methods of measurement are to be defined in the Network Sharing Agreement. Sites designated as "critical" will be required to have battery backup power of 8 hours, and shall have generators with a fuel supply sufficient to operate the generators for at least 48 hours. The D Block licensee(s) will make reasonable efforts to provide a fuel supply at "critical" sites above this requirement sufficient for a minimum of 5 days. The designation of a site as "critical" shall be a joint decision by the D Block licensee(s) and the Public Safety Broadband Licensee, in consultation with the relevant community. The designation of sites as "critical" shall not be required to cover more than 35 percent of the shared wireless broadband network sites for the D Block license(s); however, the D Block licensee(s) shall use commercially reasonable efforts to designate as "critical" additional sites requested by the Public Safety Broadband Licensee, up to 50 percent of all the licensee's sites. We request comments on these proposals.

[237] State of New York, Office of General Services, Verizon Wireless Contract Number PS61217 (effective August 15, 2007), available at http://www.ogs.state.ny.us/purchase/prices/7700802459prices1207.pdf (last viewed on Sept 11, 2008). This rate is available as an add on option for subscribers of the basic voice plan offered by Verizon for $32.99 per month.

[238] *Id*. This price reflects a 25 percent discount off the standard retail rate of $10.00 per month. We note that Sprint Nextel also offers a "Basic 200 Plan" for $5 per month.

[239] *See*, *e.g.*, Televate Comments at 10, PSST Comments Appendix C at 3, Peha Comments at 13.

118. We also find considerable support in the record for permitting reliance on non-terrestrial options to ensure reliability. The PSST, for example, suggests that reliability, availability, and hardening expectations could be "achieved through a variety of means [including] backup reliance on satellite coverage."[240] SIA, MSV, Inmarsat, and MSUA all encourage the use of satellite services as part of the nationwide network. Several other commenters also support the use of satellite or similar services to complement the overall network.[241] MSV in particular proposes that the Commission "offer the D Block licensee the option of providing satellite service in return for greater flexibility in meeting certain license requirements."[242] These commenters argue that non-terrestrial services can provide critical redundancy to a terrestrial system, increasing the reliability and robustness of the network.[243] MSV states, for example, that "disasters that impair or destroy terrestrial wireless networks either directly or by disabling the power grid are extremely unlikely to have any adverse impact on satellite networks."[244]

119. We agree with commenters that non-terrestrial capabilities can serve the interests of public safety by increasing the survivability of the system. Although we do not expect that non-terrestrial service can fully substitute for terrestrial network services, we find that imposing hardening, and robustness requirements on all sites of the network would jeopardize the economic viability of the network. Accordingly, we propose to permit the D Block licensee(s) and the Public Safety Licensee to agree on other methods to improve network resiliency in lieu of designating critical cell sites. These might include deployment of mobile assets or the use of satellite facilities. Parties are invited to comment on this proposal. We also seek comment on whether additional satellite capability would further enhance the nationwide shared wireless broadband network and whether it would serve the public interest to provide additional flexibility to a D Block licensee in meeting its licensing obligations if it integrates a satellite component or other non-terrestrial technology with the shared wireless broadband network.

120. *Capacity, Throughput, and Quality of Service.* A number of parties note that an analysis of the economic viability of the shared wireless broadband network cannot be made without addressing certain key technical parameters such as edge of cell data rates and data rates for indoor coverage. [245]

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[240] PSST Comments, Attach. C at 3. *See also* PSST Comments at 34 n.72.

[241] *See* Washington Comments at 1; Mississippi Comments at 1; Comcentric Comments at 4; Wirefree Comments at 15. Space Data advocated using their "near space," "balloon-borne" network of transceivers that can reach 99.3% of the population less expensively than construction a terrestrial network with similar reach. Space Data Comments at 1-3, 7. The SDR Forum notes that cognitive radios could be used as "an enabling technology" to help integrate satellite and terrestrial services. SDR Forum at 20-21, 23.

[242] MSV Comments at i-ii.

[243] See e.g. MSV Comments at 21.

[244] MSV Comments at 9-10.

[245] *See* ALU Comments at 5 (recommending: (1) a minimum cell edge data rate of 256 Kbps on the forward link (base to mobile), and 128 Kbps on the reverse link (mobile to base); (2) a link budget supporting 95% (area) coverage reliability corresponding to 90% (edge) contour reliability; and (3) a median throughput per transceiver of 1 Mbps downstream and 600 Kbps upstream over 50% of the service area). *See also*, Stagg Newman Comments, attached White Paper "750 MHz RF Coverage Design for the State of North Carolina", pp 19 – 20, proposing 1.0 – 2.0 Mbps forward link and 450 – 750 kbps return link (avg.) over 90% of the coverage area and 300 kbps forward link and 50 kbps reverse link at the cell edge covering 85% of the population of North Carolina; *See also* Public Safety Spectrum Trust Comments, attachment C "Shared Wireless Broadband Network Technical Analysis" Table 1-A proposing 1000 kbps forward link and 256 kbps reverse link for dense urban and urban morphologies, 512 kbps forward link and 128 kbps reverse link for suburban and rural morphologies, and 128 kbps forward link and 64 kbps reverse link for highways; *See also*, US Cellular ex parte of August 29, 2008 proposing to revise these values to 256 kbps in both directions in urban environments, 128 kbps in both directions for suburban and rural areas, and 64 kbps in both directions on highways, under conditions of 70% loading.

Our proposed rules address these and other points raised by commenters.

121. We propose that the shared wireless broadband network typically provide data speeds of at least 1 Mbps in the downlink direction and 600 Kbps in the uplink direction. Irrespective of this requirement, the D Block licensee(s) must provide public safety users with data speeds that are at least as fast as the best data speeds provided to commercial users of the shared wireless broadband network. We also propose that, at the edge of coverage, the shared wireless broadband network shall provide for data rates of a minimum of 256 kbps directions in urban environments, 128 kbps for suburban and rural areas, and 64 kbps on highways, all under 70 percent loading conditions, in both the downlink and uplink directions as recommended by US Cellular. We recognize that these data speeds may appear to be relatively slow, but note that they generally ensure that basic service is available even at the edge of coverage under relatively high traffic conditions. For purposes of this rule, we propose that dense urban will encompass areas where the population per square mile is 15,000 people or greater; urban 2,500 – 14,999, suburban 200-2499, and rural 0 – 199, as suggested by the PSST.[246] We also propose these data speeds serve only as design objectives. It would not be practical or appropriate to apply these data rates as the minimum for any given device at any particular time or location. We appreciate the need to address planning factors for indoor coverage. We are proposing propagation factors in the rules that are to be taken into account in designing the shared wireless broadband network relative to indoor coverage for VoIP service. We find that it is appropriate to focus only on VoIP because these types of communications occur in real time. Nonetheless, we find that designing the system for indoor VoIP coverage may well serve to ensure the availability of data service in buildings as well. We also propose to address service to vehicles moving at speeds of up to 100 mph by planning for coverage based on a 1.5 Watt EIRP mobile vehicle mounted radios.[247] We invite comment on these specific proposals

122. We are not proposing any specific requirements relative to overall capacity of the shared wireless broadband network.[248] The overall capacity of a network is very difficult to define because it can depend on many variables such as the level of use at particular locations, how use varies over time, the types of applications that are used, etc. Moreover, it is not feasible to establish rules that would address the various capacity requirements throughout the nation. For example, the capacity required in a dense urban area where public safety has implemented a wide variety of broadband applications would be much greater than in a rural area where only minimal broadband applications might be used. We also note that none of the commenters specifically addressed overall capacity of the wireless broadband network other than in the context of specifications for data speeds or to suggest that capacity should be negotiated under the Network Sharing Agreement We agree that the capacity of the shared wireless broadband network would be best addressed through negotiation under the Network Sharing Agreement. We do not anticipate that this will create any significant uncertainty for prospective D Block licensee(s) because we expect the capacity requirements will generally follow the patterns of commercial networks. We solicit comment on this analysis. We are also proposing to require that the Network Sharing Agreement include a process for demand forecasting and that the D Block licensee(s) deliver to the Public Safety Broadband Licensee monthly capacity utilization reports as discussed below.

123. We also propose a number of requirements to ensure quality of service for public safety. We note that the Department of Homeland Security is working on developing wireless priority service for

[246] Public Safety Spectrum Trust Comments, Attachment C "Shared Wireless Broadband Network Technical Analysis" Table 1-B.

[247] *See* Stagg Newman Comments, attached White Paper "750 MHz RF Coverage Design for the State of North Carolina", pp 19 – 20, proposing an assumed 1.5 Watt EIRP vehicle mounted radio for public safety vehicles.

[248] Elsewhere in this Third Further Notice, however, we require the D Block licensee(s) to ensure public safety users' access to 10 megahertz of spectrum at all times and 12 to 14 megahertz of spectrum in the case of emergencies. *See supra* discussion of Spectrum Use Issues.

public safety communications. While we encourage the further development and implementation of wireless priority service for public safety, we will not require implementation before appropriate standards are developed and appropriate hardware and software is available. As discussed elsewhere, we propose to require the Public Safety Broadband Licensee to establish access priority and service levels, and authenticate and authorize public safety users. The Public Safety Broadband Licensee may accomplish this under the Network Sharing Agreement by establishing its own system that would accomplish these functions or defining parameters that are compatible with commercial technology and can be easily implemented by the D Block licensee(s). This function must be capable of rapid updates to meet public safety's needs. We ask for commenters' views on these proposals.

124. We note that US Cellular proposed a number of amendments to the PSST's proposed technical requirements whereby the Public Safety Broadband Licensee would establish a system that would be integrated with the shared wireless broadband network to provide a nationwide set of public safety applications, automatically authenticate public safety users, and assign the required priority or quality of service to public safety communications.[249] The implication of this proposal is that it would serve to ensure overall quality of service. It is not clear precisely how this proposal might be implemented. We invite comment on US Cellular's proposal and whether it is viable for both public safety and the prospective D Block licensee(s). We also invite comment on potential costs of this approach and how it might be funded.

125. *Security and Encryption*. We tentatively conclude that we should require the shared broadband network to maintain security and encryption features consistent with commercial best practices and with capabilities described in the Technical Appendix and the *Second Report and Order*.[250] We recognize that a number of commenters propose more specific requirements. The Wireless Rehabilitation Engineering Research Center for Wireless Technologies, for example, recommends the use of open access networks with built-in default encryption, to reduce potential security risks. [251] Cook Consulting recommends using "whitelisting" protocol or encryption to protect the network.[252] Region 33 states that the network should have the same stringent security and encryption requirements as existing and future state and Federal databases.[253] The PSST and NPSTC propose a set of detailed security requirements.[254] Other parties, however, argue that the Commission should maintain a more flexible approach. Leap Wireless states there should be no security requirements beyond what's required for nationwide commercial CMRS networks.[255] Ericsson suggests that security measures beyond those already provided by commercial networks should be negotiated between the D Block licensee and the PSBL and detailed in the NSA.[256] Sprint Nextel states that network security and encryption should be "consistent with state-of the-art technologies."[257] In view of the divergence of opinions regarding the need for more specific security and encryption requirements, and on the appropriate requirements to adopt, we tentatively

[249] US Cellular *ex parte* of August 29, 2008 proposing various amendments to the PSST proposed technical requirements.

[250] See *Second Further Notice,* 23 FCC Rcd at 8131; *Second Report and Order*, 22 FCC Rcd at 15434 ¶ 405.

[251] Wireless RERC Comments at 15.

[252] Peter G. Cook Consultancy, Inc. Comments at 7.

[253] Region 33 Comments at 10.

[254] PSST Comments Attachment C, at 8; NPSTC Comments at 55.

[255] Leap Wireless Comments at 12.

[256] Ericsson Comments at 22-23.

[257] Comments of Sprint Nextel Corporation at 11.

conclude that the public interest would be better served by maintaining flexibility similar to what we adopted in the *Second Report and Order*. Specifically we propose to require the D Block licensee(s) to provide security and encryption consistent with commercial best practices. Further, we propose to require that the D Block licensee(s) shall: (1) comply with U.S. Federal government standards, guidelines and models that are commercial best practices for wireless broadband networks; (2) implement controls to ensure that public safety priority and secure network access are limited to authorized public safety users and devices, and utilize an open standard protocol for authentication; and (3) allow for public safety network authentication, authorization, automatic logoff, transmission secrecy and integrity, audit control capabilities, and other unique attributes.

126. *Power Limits/Power Flux Density Limits/Related Notification and Coordination Requirements.* In the *Second Further Notice*, the Commission addressed the discrepancy between the text of the *Second Report and Order*, and the applicable rules of the *Second Report and Order*. The text indicated that we would not adopt any power flux density (PFD) limit requirement in the public safety broadband segment, based on the limited record received on this issue.[258] However, the applicable rules require the Public Safety Broadband Licensee to meet a PFD limit when operating base stations at power levels above 1 kW ERP.[259] In light of this discrepancy, we sought comment on whether to retain this PFD requirement for the public safety broadband spectrum.[260] The Commission also noted that Verizon Wireless filed a petition for reconsideration of the *First Report and Order* with regard to certain of the notification and coordination obligations placed on commercial 700 MHz licensees.[261] In light of this petition, we sought comment on whether to apply any or all of Verizon's proposed rule changes to the public safety broadband spectrum.

127. NPSTC supports retaining the PFD requirement, stating that "the PFD requirement should be retained, as it is there to provide an environmental baseline for which systems can be designed in order to manage the coexistence of various types of systems…additionally, [a]ll of the notifications should also be retained without any redefinition (e.g. the 1 kW/MHz proposed by Verizon), as these notifications serve as a proactive means to coordinate operations such that interference can be avoided before it happens."[262] CEA suggests that the Commission impose the same out of band emission (OOBE) limit for the D Block that applies to the C Block."[263]

128. Under existing rules, Upper 700 MHz Band commercial licensees (*i.e.*, C and D Block licensees), if operating base stations at power levels greater than 1 kW ERP, must meet a PFD limit of 3 mW/m^2 on the ground within 1 km of each base station. They must also notify all public safety licensees authorized within 75 km of the base station and all 700 MHz public safety regional planning committees with jurisdiction within 75 km of the station of their intention to operate the base station at a power level greater than 1 kW ERP. Similarly under our rules, the Public Safety Broadband Licensee must satisfy this PFD requirement when operating a base station at a power level greater than 1 kW ERP.[264] Verizon,

[258] *See id*., 22 FCC Rcd at 15417 ¶ 358.

[259] *See* 47 C.F.R. § 90.542(a)(5), (b).

[260] This requirement had initially been imposed on Upper 700 MHz C and D Block licensees to protect public safety narrowband licensees from interference.

[261] Petition for Reconsideration of Verizon Wireless, WT Docket No. 06-150 (filed June 14, 2007) (Verizon Petition).

[262] NPSTC Comments at 46-47.

[263] Comments of Consumer Equipment Association at 6.

[264] We do not, however, require the PSBB licensee to notify other 700 MHz licensees of its intention to operate at a power level greater than 1 kW ERP.

in its petition, seeks various changes to our PFD and notification requirements for commercial 700 MHz licensees, asking *inter alia*, that the trigger for such requirements be changed from 1 kW ERP to 1 kW/MHz ERP. NPSTC, which did not file comments in response to the Verizon petition, appears to request that we retain the current 1 kW ERP PFD/notification trigger for C, D, and Public Safety Broadband licensees.

129. The Upper 700 MHz band plan places the public safety narrowband channels (at 769-775 MHz) in between the Public Safety Broadband spectrum (at 763-768 MHz) and the upper C block (at 776-787 MHz). Thus, any decision to modify the PFD trigger for either the Public Safety Broadband spectrum or the upper C block could have a potential impact on public safety narrowband channel operations. Therefore, rather than deciding, in this proceeding, on the appropriate PFD/notification trigger for the Public Safety Broadband spectrum, we shall defer this decision to the upcoming proceeding addressing the Verizon petition, where we will take a comprehensive look at the potential consequences for the public safety narrowband channels of modifying the trigger for the Public Safety Broadband Licensee *and* the C block licensee. NPSTC's comments in the instant proceeding shall be incorporated into the proceeding addressing the Verizon petition. We also invite comments from other parties on this issue, and any such comments will be incorporated into that proceeding as well.

130. With regard to CEA's suggestion that the Commission impose the same out-of-band emission (OOBE) limit for both the C and D Blocks, currently the D Block licensee is required to provide enhanced OOBE protection[265] to only the public safety narrowband channels, while the C block licensee is required to provide such protection to both the public safety narrowband channels *and* the Public Safety Broadband spectrum. We do not require the D Block licensee to provide this extra OOBE protection to the Public Safety Broadband spectrum due to the special relationship that exists between the D Block and Public Safety Broadband Licensee. If we decide to maintain that relationship, we tentatively conclude that we should continue to require the D Block licensee to provide extra OOBE protection only to the public safety narrowband channels. We tentatively conclude as well that if we do not maintain the existing relationship between the D Block and Public Safety Broadband Licensee, we should require the D Block licensee to provide extra OOBE protection to both the Public Safety Broadband spectrum and the public safety narrowband channels – and thus require C and D Block licensees to meet the same OOBE limits in protecting public safety operations, as CEA suggests.

131. *Satellite-capable Handset Requirement.* We propose to continue requiring that the D Block licensee make available to public safety users at least one handset that includes an integrated satellite solution, by which we mean that the handset must be capable of operating on both the 700 MHz public safety broadband network and on the satellite frequency bands and/or systems of satellite service providers with which the Public Safety Broadband Licensee has contracted for satellite service.[266] In addition, as under existing rules, we propose not to establish a specific deadline, but to leave the terms and timeframe for the availability of the handset to be specified in the NSA. We propose to clarify, however, that in the event we license the D Block on a regional basis, we do not preclude the regional licensees from relying on the same handset model to meet this requirement. In addition, because it is not clear that current or developing technology can provide for handoffs between a terrestrial network and a satellite service, however, we propose to clarify that handsets need not provide for seamless operation between the terrestrial and satellite modes to meet our requirement. We also tentatively decline to adopt MSV's proposal that all public safety handsets be required to be satellite-enabled. As before, we find that

[265] The standard OOBE limit, which applies to CMRS operations in various bands, requires licensees to attenuate their emissions by a factor not less than 43 + 10log P dB. The enhanced OOBE protection referred to herein requires Upper 700 MHz commercial licensees to attenuate their base station emissions by a factor not less than 76 + 10 log (P) dB and to attenuate mobile and portable station emissions by a factor not less than 65 + 10 log (P) dB.

[266] *See Second Report and Order*, 22 FCC Rcd at 15452 ¶ 464.

the Public Safety Broadband Licensee, in consultation with the D Block licensee(s), will be in the best position to determine the extent to which public safety equipment should have integrated satellite capability. We invite further comment, however, on whether we should require more than one handset with an integrated satellite solution and if so, what number or percentage of devices should have that feature.

3. Performance Requirements, License Term, and Renewal

132. Background. In the *Second Report and Order*, we decided that the D Block license would be issued for a period of ten years and imposed unique performance requirements for the D Block license in connection with the construction of the shared wireless broadband network. Specifically, we required the D Block licensee to provide signal coverage and offer service to at least 75 percent of the population of the nationwide D Block license area by the end of the fourth year, 95 percent by the end of the seventh year, and 99.3 percent by the end of the tenth year.[267] We further specified that "the network and signal levels employed to meet these benchmarks be adequate for public safety use . . . and that the services made available be appropriate for public safety entities in those areas."[268]

133. Certain other requirements were imposed to further ensure coverage of highways and certain other areas such as incorporated communities with a population in excess of 3,000.[269] We concluded that these build-out requirements "will ensure that public safety needs are met."[270] We also required, however, that, "to the extent that the D Block licensee chooses to provide commercial services to population levels in excess of the relevant benchmarks, the D Block licensee will be required to make the same level of service available to public safety entities."[271]

134. In addition to establishing performance requirements and a ten-year license term, we also determined that the performance requirements and license period would start on February 17, 2009. We determined that this would be the initial authorization start date because it is the DTV transition date.[272] We also established that at the end of the ten-year term the D Block licensee would be allowed to apply for license renewal and that renewal would be subject to the licensee's success in meeting the material requirements set forth in the NSA as well as all other license conditions, including meeting the performance benchmark requirements.[273] Because the initial NSA term expired at the same time, we decided that the D Block licensee must also file a renewed or modified NSA for Commission approval at the time of its license renewal application.[274] Given these detailed license renewal requirements, we declined to impose a separate substantial service showing in the *Second Report and Order*.

135. In the *Second Further Notice*, we sought comment on whether we should revise the performance requirements that we imposed on the D Block licensee with regard to building out the nationwide, interoperable broadband network and, if so, how those requirements should be revised.[275] Specifically, we sought comment on whether we should retain the existing end-of-term population

[267] *Second Report and Order*, 22 FCC Rcd at 15445 ¶ 437.

[268] *Id.* at 15446 ¶ 440.

[269] *See id.* at 15445 ¶ 438 – 15446 ¶ 440.

[270] *Id.* at 15445 ¶ 437.

[271] *Id.* at 15446 ¶ 440.

[272] *Id*. at 15450 ¶ 457.

[273] *Id*. at 15450 ¶ 458.

[274] *Id*.

[275] *Second Further Notice*, 23 FCC Rcd at 8075 ¶ 74, 8080-86 ¶¶ 88-105.

benchmark of 99.3 percent or whether we should adopt a lower population benchmark that is equal to or more aggressive than the 75 percent benchmark that is applicable to the 22 megahertz C Block that is licensed on REAG basis.[276] We noted that each of the top four nationwide carriers is currently providing coverage to approximately 90 percent or more of the U.S. population.[277] Given that existing commercial wireless infrastructure already covers approximately 90 percent of the population, we sought comment on whether it is reasonable to expect that the D Block licensee would be able to meet at least a 90 percent of the population coverage requirement or more, or whether some other coverage requirement is appropriate.

136. We observed that for the 22 megahertz C Block we required licensees to provide signal coverage and offer service to at least 40 percent of the population in each EA of the REAG license area within four years and to at least 75 percent of the population in each EA of the REAG license area by the end of the ten-year license term.[278] Given that the licenses in the C Block were successfully auctioned in Auction 73, and that at least one bidder has put together a nearly nationwide geographic footprint with these licenses, we assumed that the D Block licensee should, at the very minimum, be able to meet these benchmarks with respect to its nationwide license. We sought comment on that assumption.

137. In addition, we invited comment on whether we should extend the license term for the D Block license, and possibly the Public Safety Broadband License, if we determined to provide for construction benchmarks that extended past the initial license term that we established for the D Block license.[279] We asked whether doing so would make it easier for the D Block licensee to meet the performance requirements that the Commission adopts. Specifically, if we were to adopt a 15-year license term, we sought comment on whether this would increase the commercial viability of the required network while still meeting public safety needs. If we were to adopt such a modification, we asked whether the interim build-out benchmarks should be modified. For example, we stated that we could require the D Block licensee to provide signal coverage and offer service to at least 50 percent of the population of the nationwide license area by the end of the fifth year, 80 percent of the population of the nationwide license area by the end of the tenth year, and 95 percent of the population of the nationwide license area by the end of the fifteenth year. We also noted that the NSA was to have a term not to exceed 10 years from February 17, 2009, to coincide with the term of the D Block license, and we asked whether we should extend the term of the NSA to be co-extensive with any extended term we may adopt for the D Block.[280]

138. We sought further comment on whether we should revise our rules to permit the D Block licensee to use Mobile Satellite Service to help it meet its build-out benchmarks.[281] We noted that satellite services can enable public safety users to communicate in rural and remote areas that terrestrial services do not reach or in areas where terrestrial communications networks have been damaged or destroyed by wide-scale natural or man-made disasters. In light of these observations, we asked if we should permit the D Block licensee to utilize Mobile Satellite Service as a way to meet, in part, its build-out obligations.[282]

139. Parties who filed comments in response to these issues that we raised in the Second

[276] *Id*. at 8081 ¶ 91.

[277] *Id.* (citing USB Warburg Investment Research, US Wireless 411, at 17 (Mar. 18, 2008)).

[278] *Id.* at 8082 ¶ 94.

[279] *Id*. at 8081 ¶ 90, 8083 ¶¶ 96, 98.

[280] *Id.* at 8083 ¶ 98.

[281] *Id*. at 8083-84 ¶ 99.

[282] *Id*. at 8084 ¶ 100.

Further Notice, include nationwide service providers,[283] regional service providers,[284] small service providers,[285] consumer electronics manufacturers,[286] commercial entities,[287] entities representing rural interests,[288] entities representing public safety organizations,[289] and citizens.[290] In addition, several local governments filed comments.[291] Most contend that the current final benchmark requirement -- that the network cover at least 99.3 percent of the population nationwide within 10 years -- is unrealistic. For instance, AT&T states that the requirement "to build out the public/private network to cover 99.3 percent of the population nationwide within ten years" "may have been overly aggressive."[292] Likewise, Interisle believes that the "99.3% benchmark for year 10 coverage of the population is unrealistically high."[293]

140. A range of final benchmarks to levels less than 99.3 percent are proposed in the comments of many commercial commenters. For example, some of these commenters propose a final benchmark of 95 percent population coverage.[294] Northrop Grumman asks "the Commission to adopt a coverage benchmark of 95%,"[295] which it considers to be "a much more reasonable level for an especially cost-intensive build-out of new network service."[296] Televate believes that the D Block licensee should "serve at least 95 [percent] of the population."[297] Space Data, however, argues that there is no need to relax the performance requirements that apply to the 700 MHz D Block spectrum.[298]

141. Leap recommends that the "performance requirements relating to the construction of the network should be set at the same level as was set for the C Block in Auction 73."[299] In its reply

[283] AT&T Comments at 14; Sprint Nextel Comments at 2, 14-15; US Cellular Comments 21.

[284] Leap Comments at 13; NTCH Comments at 9; SouthernLINC Reply Comments at 7.

[285] ACT Comments at 2; Big Bend Comments at 2; CTC Comments at 2; Kennebec Comments at 2; PVTC Comments at 2; Ponderosa Comments at 2; Smithville Comments at 2; Spring Grove Comments at 2; Van Buren Comments at 2; Wiggins Comments at 2.

[286] CEA Comments at 3; Ericsson Comments at 26; Motorola Comments at 13; Qualcomm Comments at 11; Motorola Reply Comments at 4.

[287] ComCentric Comments at 4; Coverage Co. Comments at 6; GEOCommand Comments at 9; Google Comments at 12; Interisle Comments at 6; Rivada Comments at 2; Space Data Reply Comments at 2; Televate Comments at 4; Tyco Comments at 5; Wirefree Comments at 15.

[288] Council Tree Comments at 14.

[289] AASHTO Comments at 11; APCO Comments at 14; NATOA Comments at 8; NENA Comments at 2; NPSTC Comments at 12; Region 6 Comments at 2; Region 20 Reply Comments at 14; Region 33 Comments at 18; PSST Comments at 34.

[290] Bazelon Comments at 14; Newman Comments at 4; Peha Comments at 5.

[291] ADA County Sheriff's Office Comments at 2; Philadelphia Comments at 2.

[292] AT&T Comments at 14.

[293] Interisle Comments at 6.

[294] *See* Sprint Nextel Comments (advocating 95 percent with a bidding credit if the bidder commits to greater); Northrop Grumman Comments at 5. *See also* ACT Comments at 2.

[295] Northrop Grumman Comments at 5; Northrop Grumman Reply Comments at 1.

[296] Northrop Grumman Comments at 5.

[297] Televate Comments at 9.

[298] Space Data Reply Comments at 2.

[299] Leap Comments at 13.

comments, Council Tree "endorses" Leap's proposal that the "network construction requirements for the D Block license be modified to match those that applied to the Upper 700 MHz Band C Block licenses awarded in Auction 73."[300] SouthernLINC encourages the Commission to reject those arguments that call for network construction based on "commercial-level best practices for reliability" or C Block-type coverage requirements of only 75% of the population."[301] If public safety agencies only need commercial-grade wireless coverage, SouthernLINC states that they should simply subscribe to existing commercial offerings. A number of other parties simply recommend that the Commission propose more realistic benchmarks without offering a specific percent coverage of the population.

142. A few public safety commenters support 95 percent or lower population coverage, including the National Regional Planning Council (NRPC).[302] NRPC reasons that "[w]ith commercial wireless operations today already covering approximately 90% of the US population base, this would be a good starting point with a goal of adequate broadband coverage over 95% of the US population within the 10 year license term."[303] Region 6, 700 MHz Planning Committee (Region 6), asserts that a more "realistic" performance requirement "would be 95% of the United States population within all Urban Areas as defined by the Federal Department of Homeland Security, while allowing the successful bidder to expand that coverage upon execution of Memorandum of Understandings with any remaining governmental agencies."[304] In addition, Region 33 considers 99.3 percent "unrealistic" and supports a reduction down to 90 percent, asserting this would be "more attainable and feasible."[305]

143. Other national public safety commenters, however, have not advocated for a reduction in performance requirements, or for a more modest reduction. NATOA does not appear to support any reductions in performance requirements. APCO argues for an extension of the deadlines of five years, but does not discuss reductions in the final benchmark level. PSST and NPSTC argue for a reduction to 98 percent.[306] NENA supports a "reasonable" reduction of the 99.3 percent requirement, but does not specify to what level.

144. In its en banc testimony, US Cellular states that the standards "for population coverage and reliability should be achieved over the license term, and the rules should allow reasonable differences in build-out and performance based on the population density of the license areas."[307] US Cellular proposes that the rules "specify a range for population coverage, permitting the PSST, in consultation with public safety entities and potential bidders, to specify the requirements for specific areas as part of the NSA put forward pre-auction."[308] US Cellular's example of such a tiered structure reflects four tiers of coverage requirements of 86, 90, 94, and 98 percent, from lowest to highest population densities, for

[300] Council Tree Reply Comments at 14.

[301] SouthernLINC Reply Comments at 7.

[302] NRPC Comments at 4; RPC 6 Comments at 2; RPC 33 Comments at 18.

[303] NRPC Comments at 4.

[304] RPC 6 Comments at 2.

[305] RPC 33 Comments at 18.

[306] PSST Comments at 5; NENA Comments at 2; NPSTC Comments at 12.

[307] Testimony of LeRoy T. Carlson, Jr., Chairman, US Cellular, FCC En Banc Hearing, Brooklyn, New York, Federal Communications Commission, July 30, 2008, http://www.fcc.gov/realaudio/presentations/2008/073008/carlson.pdf (Carlson Testimony) at 3.

[308] *Id.* at 3-4.

license areas based on NPSPAC regions.[309]

145. Some commenters argue that keeping the existing 99.3 percentage population benchmark is acceptable as long as the Commission extends the time period to meet this objective. Ericsson does not believe that the Commission needs to lower the end-of-license term coverage requirement to less than 99.3% of population, if the Commission lengthens the D Block license term. Ericsson states that extending the D Block license term from "10 years to 15, 20, or even 25 years would allow the schedule of build-out milestones to be spread across a longer time period."[310] Likewise, Council Tree contends that, "[g]iven the uncertainties inherent in the 700 MHz Public/Private Partnership," the D Block license term "should be extended from ten years to twenty years in duration regardless of the determinations the Commission makes with respect to its performance requirements."[311] Wirefree also "supports extending the license term from 10 to 15 years as a fair trade off for building a shared use network for public safety."[312]

146. Some public safety organizations also support extending the D Block license term. PSST suggests that if the Commission keeps the existing 99.3 percentage of population benchmark, then the Commission should "extend the D Block license term (and the PSBL license term) by five years with a corresponding extension of the current construction requirements."[313] AASHTO believes that "reaching 99.3% of the population within ten years from the issuance of a license is admirable and perhaps can remain as an ultimate goal, but with an increased time span to achieve the goal."[314] APCO contends that it is reasonable "to extend the timelines of some of these benchmarks by five years (with a corresponding extension of the license term)."[315] NENA supports a reasonable reduction in build-out requirements, "e.g., reducing the 99.3% geographic build-out requirement to a 15-year license term" rather than the current 10 year license term.[316]

147. Comcentric, Leap, and Ericsson support the notion that the Commission should allow the D Block licensee to meet, at least in part, its build-out obligation through the use of Mobile Satellite Service. For areas without terrestrial network coverage, Leap indicates that the Commission could ensure that public safety officials have adequate service by permitting the carrier to use other alternatives for satisfying coverage requirements (e.g., satellite).[317] Ericsson states that the Commission should allow the D Block licensee to meet the interim benchmarks though satellite service, but that the licensee should be required to meet the final benchmark only through the use of terrestrial broadband facilities.[318]

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[309] *Id.* at 8. In its comments and reply comments, US Cellular suggests that the Commission should require the D Block licensee to "provide signal coverage and offer service to at least 50 percent of the population of the nationwide license area by the end of the fifth year, 80 percent of the population of the nationwide license area by the end of the tenth year, and 95 percent of the population of the nationwide license area by the end of the fifteenth year." US Cellular Comments at 21 & n.43, citing *Second Further Notice*, at ¶ 95; US Cellular Reply Comments at 12.

[310] Ericsson Comments at 26.

[311] Council Tree Comments at 19.

[312] Wirefree Comments at 15.

[313] PSST Comments at 34.

[314] AASHTO Comments at 11.

[315] APCO Comments at 30.

[316] NENA Comments at 2.

[317] Leap Comments at 13; Leap Reply Comments at 9.

[318] Ericsson Comments at 28.

Comcentric argues that the public broadband network should cover "a minimum of 98% of the population with terrestrial links and 100% of the geographic area with 'in motion' satellite connectivity for rural public safety officers." [319]

148. Discussion. We tentatively conclude that we should modify the population-based performance requirements and the length of the license term that we adopted in the *Second Report and Order* for the D Block spectrum in order to make this spectrum more commercially viable while at the same time ensuring that public safety needs are met. As discussed below, we propose to require the D Block licensee(s) to meet performance requirements based on PSRs, regardless of whether the D Block license is regional or nationwide. We propose that a D Block licensee must meet specified population coverage benchmarks at the end of the fourth, tenth, and fifteenth years of its license term, and that it must meet these benchmarks in each PSR over which it is licensed, regardless of whether the D Block spectrum is licensed on a regional or nationwide basis.

149. Specifically, we tentatively conclude that the licensee(s) of D Block spectrum be required to provide signal coverage and offer service to at least 40 percent of the population in each PSR by the end of the fourth year, and 75 percent by the end of the tenth year. We propose to adopt a "tiered" approach after 15 years for the final benchmark, applying one of three benchmarks depending on the population density of the PSR: (1) for PSRs with a population density less than 100 people per square mile, the licensee(s) will be required to provide signal coverage and offer service to at least 90 percent of the population by the end of the fifteenth year; (2) for PSRs with a population density equal to or greater than 100 people per square mile and less than 500 people per square mile, the licensee(s) will be required to provide signal coverage and offer service to at least 94 percent of the population by the end of the fifteenth year; and (3) for PSRs with a population density equal to or greater than 500 people per square mile, the licensee(s) will be required to provide signal coverage and offer service to at least 98 percent of the population by the end of the fifteenth year.[320] These revised population coverage requirements will have to be met on a PSR basis, and the licensee(s) will have to use the most recently available decennial U.S. Census data at the time of measurement to meet the requirements. We also tentatively conclude to revise the length of the D Block license term from 10 to 15 years so that it coincides with our proposed end-of-term performance requirements. We also tentatively conclude that we will not impose a separate substantial service showing for license renewal apart from requiring that a D Block licensee meet the requirements set forth in the NSA and our proposed performance requirements, with the possible exception of the Gulf of Mexico PSR, as discussed below. We seek comment on these tentative conclusions.

150. Our proposal would thus modify both the final and interim D Block performance requirements under the existing rules. Most significantly, we propose to reduce the final performance benchmark from 99.3 percent to the three tiers discussed above and extend the period for achieving the appropriate benchmark from 10 to 15 years. We tentatively conclude that adoption of the interim and end-of-term performance requirements will increase opportunities for participation by a larger pool of bidders,[321] and local and regional build-out will ensure that deployment is responsive to the needs of local public safety groups.[322] We also tentatively conclude that a final benchmark of 99.3 percent of population would likely not be commercially feasible, but that the benchmarks under our tiered proposal are

[319] Comcentric Comments at 4.

[320] *See* Appendix B (listing the minimum coverage requirements at the end of fifteen years for each of the regions).

[321] *See* Carlson Testimony at 2-3.

[322] *See* AT&T Comments at 25.

achievable. For example, the record indicates that 95 percent coverage is achievable,[323] and that reducing the final benchmark from 99.3 percent for a nationwide license will result in significant savings in capital and operational expenses. Space Data estimates that reducing the 10 year coverage requirement from 99.3 percent to 95 percent population nationwide will result in a capital expense savings of $1.0565 billion and an operating expense savings of $2.280 billion.[324] MSV estimates that reducing the 10-year coverage requirement from 99.3 percent to 95 percent population nationwide would result in a capital expense savings of $4.44 billion and an operating expense savings of $7.056 billion.[325] Thus, based on the record, we tentatively conclude that our proposed new benchmarks along with extending the final benchmark to fifteen years, will make building out a network more viable economically than under the current benchmarks while also ensuring that public safety needs are met. We note that while most of the licensees will meet a population benchmark of either 90 or 94 percent in year fifteen, our proposal for the third tier will require at least 98 percent coverage with a population density equal to or greater than 500 people per square mile. However, according to US Cellular's proposal, this 98 percent requirement would apply to only six percent of the total number of NPSPAC regions, and licensees that would have to meet this requirement may be able to build on existing infrastructure thus making commercial opportunities more attractive.[326] We seek comment on these conclusions.

151. We tentatively conclude that the three tiers of population benchmarks remain an aggressive requirement, given that existing commercial infrastructure currently covers only approximately 90 percent of the nation's population,[327] and that the highest level of population coverage required of any other commercial 700 MHz licensee is 75 percent.[328] Therefore, we also tentatively conclude that we should extend the time provided to the D Block licensee to meet its end-of-term build-out requirement from ten to fifteen years.[329] Giving the D Block licensee five additional years to meet the final benchmark will provide the licensee with additional time to raise capital and construct its wireless network. It will also give the D Block licensee more flexibility and the ability to lower its construction costs.[330] As a result, our proposal to give the D Block licensee five additional years to build out its network should help to stimulate commercial interest in the D Block spectrum. We also note that a fifteen year period to accomplish the final performance requirement also receives support from public

[323] *See, e.g.,* ACT Comments at 2; NNRPC Comments at 4; Northrop Grumman Comments at 5; Region 6 Comments at 2; Region 33 Comments at 18; Sprint Nextel Comments at 2; US Cellular Comments at 5.

[324] *See* Space Data Comments at Exhibit A.

[325] *See* MSV Comments at 44. *See also* Testimony of Lawrence R. Krevor, Sprint-Nextel Corp., Public Hearing on Public Safety Interoperable Communications – The 700 MHz Band Proceeding, Federal Communications Commission, July 30, 2008, http://www.fcc.gov/realaudio/presentations/2008/073008/krevor.pdf, at 2 (increasing coverage from 95 percent to 99.3 percent would increase costs by more than $6 billion).

[326] *See* Carlson Testimony at 2, 8 & n.5.

[327] *See* NPRC Comments at 4; Sprint Nextel Comments at 2; *see also Second Further Notice*, 23 FCC Rcd at 8084 ¶ 91 (citing USB Warburg Investment Research, US Wireless 411, at 17 (Mar. 18, 2008); MSV Comments at 8 (noting that "[t]he top four national wireless carriers cover on average only 92.7% of the United States population").

[328] *Second Report and Order*, 22 FCC Rcd at 15351 ¶ 162 (discussing performance requirements for REAG licenses, *i.e.*, C Block).

[329] Both public safety and commercial entities support expanding the time period that the D Block licensee has to meet the final performance requirement. *See, e.g.*, AASHTO Comments at 11; APCO Comments at 30; Council Tree Comments at 19; Ericsson Comments at 26; NENA Comments at 2; PSST Comments at 34; Wirefree Comments at 15.

[330] Ericcson Comments at 26.

safety commenters.[331] For these reasons, we tentatively conclude that the proposed final benchmark which uses a three tiered requirement at 15 years, as discussed above, provides the most aggressive coverage requirement that will still provide an adequate level of commercial feasibility, and we seek comment on this tentative conclusion.

152. Our proposal also imposes new interim coverage requirements. Specifically, instead of the current interim requirements of 75 percent at four years and 95 percent at seven years, we propose to require 40 percent at four years and 75 percent at ten years. These interim requirements are identical to the population coverage levels required of 700 MHz C Block REAG licensees at the 4 year and 10 year periods. The fact that all of the C Block licenses were successfully auctioned supports the conclusion that these interim requirements are commercially viable.[332] Thus, we tentatively conclude that the interim coverage benchmarks for the D Block of 40 percent of the population in four years and 75 percent in ten years are commercially viable and will lead to a successful auction of the D Block spectrum. Setting the first benchmark at four years should also provide an adequate period for the development of new advanced technologies so that these technologies can be incorporated into the network implemented by the D Block licensee. At the same time, our proposed interim benchmarks will still help to ensure that the D Block licensee will begin providing service to a significant portion of the nation's public safety community well in advance of the end of its license term. Thus, these proposed benchmarks for the D Block licensee are designed to balance the need to expedite the deployment of an interoperable, broadband public safety network with an appropriate consideration of commercial viability and the need to allow sufficient time for new and innovative wireless broadband technologies to develop. By proposing our three tiered benchmark with coverage levels at 90 percent or higher, we address the special coverage needs of public safety yet ensure this is commercially achievable by affording the D Block Licensee an additional five years to achieve this requirement. Accordingly, we tentatively conclude that our proposed interim benchmarks are consistent with our goal of establishing a national interoperable public safety network that will provide state-of-the-art service to the Public Safety Broadband Licensee. We seek comment on our tentative conclusion to establish the interim coverage requirements for the D Block as 40 percent of the population in four years and 75 percent in ten years, for each of the 58 PSRs.

153. We tentatively conclude that the D Block licensee should not be permitted to satisfy its performance benchmarks through the provision of non-terrestrial services such as MSS. We find that MSS and other non-terrestrial technologies cannot currently provide broadband capabilities comparable to those of a broadband terrestrial network. Further, given the significant reduction in geographic area that will need to be covered under our proposed population based benchmarks and the additional time we are proposing to provide the D Block licensee to build out, we tentatively conclude that it is reasonable to expect the D Block licensee to meet our proposed benchmarks by building out a terrestrial wireless network. Under our proposal, the D Block licensee will have fifteen years to build out a terrestrial wireless network to meet the final performance benchmarks. Therefore, requiring the D Block licensee to build out a terrestrial wireless network rather than relying on Mobile Satellite Service or other such technologies should not undercut our goal of making this spectrum more attractive to commercial development and should help ensure the development of a robust public safety network. We seek comment of these tentative conclusions.

154. To meet our proposed performance requirements, we tentatively conclude that we will require the D Block licensee to use the most recently available U.S. Census Data and that the licensee

[331] *See*, *e.g.*, PSST Comments at 34.

[332] *See* Leap Comments at 13; Council Tree Reply Comments at 14.

meet our performance requirements on a PSR basis.[333] We recognize that commercial providers typically focus exclusively on building out high population areas and that first responders have needs in smaller towns and rural areas. However, by proposing to require that the performance benchmarks be calculated on a PSR basis even in case of a nationwide license, we will ensure that areas with smaller populations and rural areas receive coverage. Accordingly, to meet the benchmarks, we tentatively conclude that the D Block licensee will be required to provide signal coverage and offer service to at least 40 percent of the population in each PSR license area within four years, 75 percent of the population in each PSR license area within ten years, and an appropriate percent of the population in each PSR license area within 15 years.[334] We also propose to clarify that, to count toward the satisfaction of our performance requirements, any build-out must provide service that meets the signal levels and other technical requirements that we propose in this Third Further Notice. Further, to the extent that the D Block licensee chooses to provide terrestrial commercial services to population levels in excess of the relevant benchmarks, we propose that the D Block licensee be required to make the same level of coverage and service available to public safety entities. We seek comment on these proposals.

155. In order to promote an additional degree of coverage in rural areas, we propose to continue, with some modifications, requiring that the D Block licensee extend coverage to major highways and interstates. We further propose to clarify, however, that any coverage necessary to provide complete service to major highways, interstates, and incorporated communities with populations greater than 3,000 beyond the network coverage required by our population benchmarks must be established no later than the end of the D Block license term. In addition, we propose that to the extent that coverage of major highways, interstates and incorporated communities with populations in excess of 3,000 requires the D Block licensee to extend coverage beyond what is required to meet its population benchmarks, we would permit that coverage to be met through non-terrestrial means, such as MSS or other such technologies. As discussed above, we tentatively conclude that the proposed population coverage benchmarks provide the best balance between maximizing coverage and ensuring commercial viability of the network and therefore, that reliance on non-terrestrial technologies is justified to the extent that the proposed requirements regarding major highways, interstates, and small communities would impose a more onerous build-out obligation. In order to provide the D Block licensee with the flexibility to use a myriad of innovative solutions, including non-terrestrial technologies, we seek comment on whether any of our existing rules for this band regarding terrestrial base stations or land stations may need to be clarified or modified to be applicable to non-terrestrial technologies that perform the same functions of terrestrial base stations and that comply with service rules applicable to the D Block and the Public Safety Broadband spectrum, including rules regarding interference protection and network specifications.[335]

156. To further facilitate public safety access to the network in low or zero-population areas where the network has not yet been constructed and to satellite services more broadly, we propose to maintain the current requirement that the D Block licensee make available to the Public Safety Broadband Licensee at least one handset suitable for public safety use that includes an integrated satellite solution under terms, conditions, and timeframes set forth in the NSA. We seek comment on these tentative

[333] We note that, by the "most recently available U.S. Census data," we mean only the most recent decennial update to the U.S. Census, currently the 2000 U.S. Census Data, and not any estimates or revisions that have occurred between the official decennial updates.

[334] *See* Appendix B.

[335] *See* Space Data *Ex Parte* September 17, 2008 letter to Marlene H. Dortch at 4-5 (requesting, among other things, that the Commission: (1) amend the definition of "base station" in Section 27.4 of the rules to include "technologies that perform the same functions as land stations," and/or (2) provide that any technical requirements in Sections 27.50 –27.70 that apply to base stations or fixed towers similarly apply to non-traditional technologies that perform the same functions as base stations or towers.).

conclusions.[336]

157. We tentatively conclude to revise the D Block license term and performance requirements start date from February 17, 2009, to the date that the D Block licensees receive their licenses. We previously anticipated that the D Block licensee would receive its license prior to February 17, 2009. Given that we no longer expect to license the D Block before February 17, 2009, we tentatively conclude that the D Block license term and performance requirements start date should be the license grant date as is consistent with other wireless services.[337] We seek comment on our tentative conclusion that we should use the license grant date as the start date for the D Block license term and performance requirements.

158. We propose to continue to allow the D Block licensee to modify its population-based construction benchmarks where the D Block licensee and the Public Safety Broadband Licensee reach agreement and the Commission gives its prior approval for a modification. This approach would allow a certain limited degree of flexibility to meet commercial and public safety needs where those needs may deviate from our adopted construction benchmarks. As with other commercial 700 MHz Band licensees, the D Block licensee will be required under our proposal to demonstrate compliance with our adopted benchmarks by filing with the Commission within 15 days of passage of the relevant benchmarks a construction notification comprised of maps and other supporting documents certifying that it has met our performance requirements.[338] The construction notification, including the coverage maps and supporting documents, must be truthful and accurate and not omit material information that is necessary for the Commission to make a determination of compliance with our performance requirements.[339] However, unlike some other commercial licenses and because of the nature of the partnership established herein, the D Block licensee will not be subject to a "keep-what-you-use" rule. Rather, the Commission will strictly enforce these build-out requirements and, if the D Block licensee fails to meet a construction benchmark, the Commission may cancel its license, depending on the circumstances, or take any other appropriate measure within its authority. We seek comment on these proposals.

159. As stated above, we also tentatively conclude to revise the license term for the D Block license from 10 to 15 years. By making this change, we will provide for uniformity in the length of the performance requirement period and the length of the D Block license term. Further, allowing a significantly longer license term overall has the separate benefit of affording additional investment confidence and certainty. Public safety commenters and commercial entities support extending the D Block license term and the related period of time to meet our proposed performances requirements.[340] By having the license term and performance requirement period end at the same time, it will be easier to assess whether the D Block license should be renewed. We seek comment on these tentative conclusions.

160. We also propose not to require the D Block licensee to make a separate substantial

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[336] As discussed elsewhere in this Third Further Notice, we also propose to continue requiring the NSA to include a detailed build-out schedule that is consistent with the performance benchmarks and requirements that we propose above.

[337] *See, e.g.*, 47 C.F.R. § 1.946.

[338] *See* 47 C.F.R. § 1.946(d) ("The notification must be filed with Commission within 15 days of the expiration of the applicable construction or coverage period.").

[339] *See*, *e.g.*, 47 C.F. R. § 1.17 (Truthful and accurate statements to the Commission); 47 C.F.R. § 1.917 ("Willful false statements made therein, however, are punishable by fine and imprisonment, 18 U.S.C. 1001, and by appropriate administrative sanctions, including revocation of station license pursuant to 312(a)(1) of the Communications Act of 1934, as amended.").

[340] *See, e.g.*, AASHTO Comments at 11; APCO Comments at 30; Council Tree Comments at 19; Ericsson Comments at 26; NENA Comments at 2; PSST Comments at 34; Wirefree Comments at 15.

service showing for license renewal consistent with our findings in the *Second Report and Order*.[341] At the end of the 15 year license term, the D Block licensee will be permitted to apply for license renewal and that renewal will be subject to the licensee's success in meeting the material requirements set forth in the NSA as well as all other license conditions, including meeting our proposed performance requirements. Given these detailed license renewal requirements, we do not propose to impose a separate substantial service showing requirement, with the possible exception of the Gulf of Mexico, as discussed below. We seek comment on this tentative conclusion to not impose on the D Block licensee a separate substantial service showing apart from meeting the requirements set forth in the NSA and our proposed performance requirements.

161. With respect to the Gulf of Mexico PSR, we note that this PSR covers a body of water and, therefore, our proposed population-based benchmarks may not be appropriate for this PSR to meet public safety needs in that region. In addition, local and state public safety entities may have very limited operations in this region. Accordingly, we propose that we give the D Block licensee for the Gulf of Mexico PSR and the Public Safety Broadband Licensee flexibility to negotiate, as part of the NSA, a coverage and service plan for public safety use for that region as needed, subject to Commission resolution in the event of disputes. We also seek comment on whether it is sufficient to require the Gulf of Mexico D Block licensee to make a showing of substantial service as a condition of licensee renewal, as other 700 MHz licensees are currently required to do,[342] as well as a showing of the D Block licensee's success in meeting the material requirements set forth in the NSA and all other license conditions. We note that, as proposed above, any build-out would have to meet the signal levels and other technical requirements that we propose in this Third Further Notice.

162. As a result of our tentative conclusion to revise the license term for the D Block license from 10 to 15 years, we also tentatively conclude to extend the license term for the Public Safety Broadband Licensee. In adopting the ten-year licensee term for the Public Safety Broadband Licensee, we sought to harmonize the license terms to facilitate the contemplated leasing arrangement and build-out requirements.[343] Extending the license term from 10 years to 15 years for the Public Safety Broadband Licensee will be consistent with this reasoning. Also, we tentatively conclude that the license term of the Public Safety Broadband Licensee should re-commence from the date that the D Block licensee receives its license, consistent with our determination to change the start date of the license term for the D Block licensee to that date. We seek comment on these tentative conclusions to extend the license term of the Public Safety Broadband Licensee.[344] We propose that, if we extend these license terms to 15 years, we should also mandate a 15 year NSA term.

163. We propose to continue requiring the NSA to include a detailed build-out schedule that is consistent with the performance benchmarks that we have proposed in this section.[345] Thus, we propose to continue to require the NSA to identify the specific areas of the country that will be built out and the extent to which major highways and interstates, as well as incorporated communities with a population in excess of 3,000, within the D Block licensee's service area will be covered by each of the performance deadlines.

164. Finally, we seek comment on an alternative approach to the one we have tentatively concluded to adopt for purposes of performance requirements, license term, and renewal in this Third

[341] *See Second Report and Order*, 22 FCC Rcd at 15450 ¶ 458.

[342] 47 C.F.R. § 27.14(e).

[343] *See Second Further Notice*, 23 FCC Rcd at 8083 ¶ 98.

[344] Elsewhere in this Third Further Notice, we similarly propose extending the initial term of the NSA to 15 years.

[345] *See Second Report and Order*, 22 FCC Rcd at 15449 ¶ 453.

Further Notice. Specifically, under such an alternative approach, we could require the D Block licensee to provide signal coverage and offer service to at least 40 percent of the population of the license area by the end of the fourth year, 75 percent of the population by the end of the tenth year, and 95 percent of the population by the end of the fifteenth year. The requirements under this alternative approach will have to be met on a PSR basis, and licensees will have to use the most recently available decennial U.S. Census data at the time of measurement to meet the requirements. As a part of this alternative approach, we also propose to revise the length of the D Block license term from 10 to 15 years so that it coincides with our proposed end-of-term performance requirements. We seek comment on this alternative approach, and specifically on the adoption of a 95 percent coverage requirement by the end of the fifteenth year of the license term instead of the three tiered approach which we propose elsewhere in this Third Further Notice.

4. Role and Responsibilities of the D Block Licensee in the Management, Operations, and Use of the Network

165. Background. In adopting the 700 MHz Public/Private Partnership in the *Second Report and Order*, we sought to delineate the respective roles and responsibilities of the D Block licensee and the Public Safety Broadband Licensee in a manner that would ensure the construction and operation of a shared, interoperable broadband network infrastructure that operated on the 20 megahertz of spectrum associated with the D Block license and the Public Safety Broadband License and that served both the needs of commercial and public safety users.[346] Under this plan, the D Block licensee and its related entities would finance, construct, and operate the shared network,[347] but the full extent of the D Block licensee's operational role was not specified. In particular, the Commission indicated that the Public Safety Broadband Licensee, which would be required to lease its spectrum on a secondary basis to the D Block licensee pursuant to a spectrum manager leasing arrangement,[348] would also have operational control of the network "to the extent necessary to ensure public safety requirements are met."[349] In the Second Further Notice, we sought comment on whether additional clarity with regard to the role and responsibilities of the D Block licensee would be helpful to ensure that the 700 MHz Public/Private Partnership achieves its goal in creating a shared, interoperable broadband network.[350] In particular, we indicated our expectation that the D Block licensee would establish a network operations system, including an operations/monitoring center, billing functions, and customer care services, among other elements, to support the network infrastructure that it deployed and the services that it provided over that infrastructure to public safety entities.[351] We sought comment on whether we should provide that all such traditional network service provider operations for the benefit of either commercial users or public safety users should be responsibilities exclusively assumed by the D Block licensee, and whether assigning such responsibilities exclusively to the D Block licensee would better enable the Public Safety Broadband Licensee to administer access to the national public safety broadband network by individual public safety entities and to perform its other related responsibilities.[352]

166. Comments. Several commenters—including both commercial and public safety entities—state that the D Block licensee should maintain control of the network, subject to some limited areas of operational authority by the Public Safety Broadband Licensee. For instance, AT&T argues that

[346] *See, e.g.,* 22 FCC Rcd at 15426 ¶ 383, 15431 ¶ 396.

[347] *See, e.g., id.* at 15428 ¶ 386.

[348] *See id.* at 15437-38 ¶¶ 414-17.

[349] *See id.* at 15434 ¶ 405.

[350] *See Second Further Notice*, 23 FCC Rcd at 8088 ¶ 113.

[351] *See Second Further Notice*, 23 FCC Rcd at 8088-89 ¶ 115.

[352] *See Second Further Notice*, 23 FCC Rcd at 8088-89 ¶ 115.

commercial partners should have "day-to-day" operational control over the entire network, "subject only to discrete PSBL operational authority defined by the Commission prior to the RFP process or a reauction."[353] Similarly, Ericsson contends that that the D Block licensee should run a substantial part of the network on a "day-to-day" basis.[354]

167. The PSST argues against allowing the D Block licensee "sole control over all of the traditional network service provider operations, including those associated with the spectrum for which the PSST is the licensee."[355] It argues that providing the D Block licensee with "sole control" will impair the Public Safety Broadband Licensee's abilities to administer access and carry out its other obligations, and that fulfilling its functions in the 700 MHz Public/Private Partnership, such as monitoring the D Block licensee's compliance with the terms of the NSA, "requires that the PSST not be passive or entirely dependent on the activities and assurances of the D Block operator."[356] The PSST further asserts that the Public Safety Broadband Licensee must continue to have a "direct relationship" with public safety users.[357]

168. The PSST argues that allowing "the D Block licensee to assume sole control of all traditional network service provider operations on PSBL spectrum would be even more problematic should the FCC authorize a wholesale-only model for the D Block licensee."[358] Under a wholesale-only approach, it argues, "it is not at all clear who would deliver the necessary services to public safety agencies, including ensuring that the primary goal of interoperability is satisfied in an environment where different services might be made available by individual retail providers in different markets, or even in the same market."[359] Accordingly, it states, if the D Block winning bidder elects a wholesale model, "the PSST and FCC will need to be confident that the specific needs of public safety users nonetheless will be met. In addition, the PSST asserts that the D Block licensee's responsibilities should include delivering "to the Public Safety Broadband Licensee capacity utilization reports that provide a comparative measure of public safety network services utilization against the documented, engineered, installed, and in-service Radio Access (RA) and terrestrial network capacity."[360]

169. Discussion. We tentatively conclude, consistent with our tentative determinations elsewhere regarding the appropriate operational role and responsibilities of the Public Safety Broadband Licensee, that, the D Block licensee(s) should assume exclusive responsibility for all traditional network service provider operations, including network monitoring and management, operational support and billing systems, and customer care, in connection with services provided to public safety users.

170. As we noted in the Second Further Notice, "primary operational control of the network is inherently the responsibility of the D Block licensee (and its related entities), which would in turn generally provide the operations and services that enable the Public Safety Broadband Licensee to ensure

[353] AT&T Comments at 16.

[354] Ericsson Comments at 30. *See also* APCO Comments at 35 (arguing that the D Block licensee should manage the network, and that the Public Safety Broadband Licensee needs to move towards a management structure that monitors D Block licensee contract performance and service relations, without duplicating the D Block licensee's core function or neglecting the agencies and citizens the PSBL is charged to protect).

[355] PSST Comments at 11-12.

[356] PSST Comments at 13.

[357] PSST Comments at 12.

[358] PSST Comments at 12.

[359] PSST Comments at 12.

[360] PSST Reply Comments, Attach. A1 at 6.

public safety requirements are met."[361] We agree with AT&T that the commercial partner will likely have the experience, resources, and personnel to best perform these functions, and that without assurance of day-to-day operational control, commercial partners might be deterred from seeking D Block licenses.[362] Providing that the D Block licensee(s) will assume exclusive responsibility for traditional operational should also avoid any duplication of efforts or responsibilities between the D Block licensee(s) and the Public Safety Broadband Licensee, improving the efficiency of network operation, and ensuring that the Public Safety Broadband Licensee will be focused on meeting its own exclusive functions and responsibilities.

171. In addition, while we provide that only the D Block licensee(s) may directly manage the network or provide network services, we observe that the Public Safety Broadband Licensee will nonetheless retain control over use of the Public Safety Broadband spectrum, pursuant to its license obligations and the spectrum manager leasing arrangement(s) for D Block secondary use lasting for the full term of the license(s),[363] and will have significant input into the provision of such services through the establishment of priority access, service levels and related requirements within the NSA process, approving public safety applications and end user devices, and ongoing monitoring of system performance made possible through the monthly reporting requirement we propose to mandate on the D Block licensee(s) showing network usage. As a consequence, reserving all traditional network provider functions to the D Block licensee(s) should not prevent the Public Safety Broadband Licensee from maintaining a direct relationship with public safety users or from carrying out its specific assigned responsibilities.

172. As noted above, we tentatively decide to impose specific obligations on the D Block licensee(s) to provide regular monthly reports on network usage to the Public Safety Broadband Licensee as proposed by the PSST. This network reporting requirement will be in addition to the existing requirement that, following the execution of the NSA, the D Block licensee(s) and Public Safety Broadband Licensee must jointly provide quarterly reports including detailed information on the areas where broadband service is deployed, how the specific requirements of public safety are being met, audited financial statements, and other aspects of public safety use of the network.[364] We anticipate that such reporting will enable the Public Safety Broadband Licensee to carry out its responsibility to monitor system performance and provide adequate oversight of the D Block licensee's operations.

173. *National Committee of D Block Licensees.* We note US Cellular's proposal that, if the D Block is licensed on a regional basis to multiple entities, there should be a National Committee of Licensees, which would: (1) "serve as a single point of contact for FCC, PSST and public safety agencies with licensees on national issues;" (2) "develop licensees' recommendations for any FCC rule changes"; (3) "negotiate changes in national NSA with PSST;" (4) "arrange support services for operations requiring inter-carrier coordination;" and (5) "work in conjunction with existing standards bodies and clearing houses."[365] The PSST also has similarly proposed that if the Commission adopts regional licensing, it should, among other things, "adopt a legally binding governance structure to facilitate interactions among multiple D Block licensees and PSST, and to ensure interoperability and nationwide

[361] *Second Further Notice*, 23 FCC Rcd at 8091-92 ¶ 124.

[362] AT&T Comments at 17.

[363] *See Second Report and Order*, 22 FCC Rcd at 15437-38 ¶¶ 414-17. *See also* 47 C.F.R. § 90.1407.

[364] *See Second Report and Order*, 22 FCC Rcd at 15471 ¶ 530.

[365] Letter from Warren G. Lavey, on behalf of United States Cellular Corp., to Marlene H. Dortsch, Secretary, FCC, WT Docket No. 06-150, filed Sept. 2, 2008 (US Cellular Sept. 2, 2008 *Ex Parte*), Attach., "Making the Partnership Work: Solutions for the 700 MHz D Block", at 7.

roaming."[366] We seek comment on these proposals, and more generally on whether, in the event we license the D Block on a regional basis, we should require the regional licensees to form a formal national governance structure, and if so, what role and responsibilities this national entity should have in the establishment of the NSA(s), the construction and operation of the regional networks, or any other matter.

174. *Wholesale Service.* With regard to the provision of wholesale service, we have proposed elsewhere in this Third Further Notice to continue to permit the D Block licensee(s) the flexibility to provide either retail or wholesale service commercially. With regard to services to public safety entities, however, we tentatively conclude that such flexibility must be limited to some extent. As the PSST notes, "[u]nder a wholesale-only approach, it is not at all clear who would deliver the necessary services to public safety agencies . . . ."[367] To address this concern, we tentatively conclude that if the D Block licensee chooses to adopt a wholesale-only model with respect to the D Block spectrum, it must still ensure, though arrangements such as the creation of a subsidiary or by contracting with a third party, that retail service will be provided to public safety entities that complies with our regulatory requirements.[368] We propose to require this arrangement to be included in the NSA, and that, whatever the arrangement, the D Block licensee should be responsible for ensuring that service to public safety meets applicable requirements. We note that the current rules require the D Block licensee to create separate entities to hold the license and network assets, respectively, and a third entity to construct and operate the network, and further require that these separate entities must be special purpose, bankruptcy remote entities, as defined in the rules, to provide the network with a certain degree of protection from being drawn into a bankruptcy proceeding. We seek comment on whether certain arrangements might enable a D Block licensee to place important assets outside the protection from bankruptcy that we intended through this structure.

5. Role and Responsibilities of the Public Safety Broadband Licensee in the Use of the Network

175. Background. In the *Second Report and Order* we charged the Public Safety Broadband Licensee with representing the interests of the public safety community to ensure that the shared interoperable broadband network meets their needs. Specifically, we assigned the following responsibilities to the Public Safety Broadband Licensee concerning its partnership with the D Block licensee:

- General administration of access to the national public safety broadband network by individual public safety entities, including assessment of usage fees to recoup its expenses and related frequency coordination duties.
- Regular interaction with and promotion of the needs of the public safety entities that would utilize the national public safety broadband network, within the technical and operational confines of the NSA.
- Use of its national level of representation of the public safety community to interface with equipment vendors on its own or in partnership with the D Block licensee, as appropriate, to achieve and pass on the benefits of economies of scale concerning network and subscriber equipment and applications.

[366] Letter from Chief Harlin R. McEwen, Chairman, Public Safety Spectrum Trust Corporation, to Marlene H. Dortsch, Secretary, FCC, WT Docket No. 06-150, filed Aug. 29, 2008 (PSST Aug. 29, 2008 *Ex Parte*), at 1.

[367] PSST Comments at 12.

[368] The relationship between a D Block auction winner and the retail-level operating company will be subject to all of the Commission's rules, including, but not limited to, provisions regarding leasing in Subparts Q and X of Part 1 of the Commission's rules.

- Sole authority, which cannot be waived in the NSA, to approve, in consultation with the D Block licensee, equipment and applications for use by public safety entities on the public safety broadband network.
- Responsibility to facilitate negotiations between the winning bidder of the D Block license and local and state entities to build out local and state-owned lands.[369]

176. We also identified several other of the Public Safety Broadband Licensee's responsibilities, which included:

- Coordination of stations operating on public safety broadband spectrum with public safety narrowband stations, including management of the internal public safety guard band.
- Oversight and implementation of the relocation of narrowband public safety operations in channels 63 and 68, and the upper 1 megahertz of channels 64 and 69.
- Exercise of sole discretion, pursuant to Section 2.103 of the Commission's rules, whether to permit Federal public safety agency use of the public safety broadband spectrum, with any such use subject to the terms and conditions of the NSA.
- Responsibility for reviewing requests for wideband waivers and including necessary conditions or limitations consistent with the deployment and construction of the national public safety broadband network.[370]

177. In developing these responsibilities, we afforded the Public Safety Broadband Licensee flexibility in overseeing the construction and use of the nationwide broadband public safety network, while seeking "to balance that discretion with the concurrent and separate responsibilities" of the D Block licensee.[371] To that end, we indicated elsewhere that the interoperable shared broadband network must incorporate, among other requirements, "[o]perational control of the network by the Public Safety Broadband Licensee to the extent necessary to ensure public safety requirements are met."[372]

178. In the *Second Further Notice*, we sought comment on whether we should clarify that the Public Safety Broadband Licensee may not assume any additional responsibilities other than those specified by the Commission in this proceeding.[373] We asked generally whether we should clarify, revise, or eliminate any of the specific responsibilities listed above that the Public Safety Broadband Licensee must assume.[374] We also sought comment in particular on whether to clarify or revise the division of responsibility between the Public Safety Broadband Licensee and the D Block licensee regarding direct interaction with individual public safety entities in the establishment of service to such entities, the provision of service, customer care, service billing, or other matters.[375]

179. In addressing these questions, we asked commenters to consider the unique role served by the Public Safety Broadband Licensee by virtue of holding the single nationwide public safety license, while not being an actual user of the network.[376] We observed that the Public Safety Broadband Licensee

[369] *Second Report and Order* at 15427 ¶ 383.

[370] *Id*.

[371] *Id*. at 15426 ¶ 383.

[372] *Id.* at 15434 ¶ 405.

[373] *Second Further Notice*, 23 FCC Rcd at 8090 ¶ 121.

[374] *Id.*

[375] *Second Further Notice*, 23 FCC Rcd at 8091 ¶ 122.

[376] *Id.*

would in many respects function much as regional planning committees presently do in the 700 MHz and 800 MHz bands, yet with a nationwide scope.[377] We noted, for example, that like regional planning committees, the Public Safety Broadband Licensee would administer access to the spectrum, coordinate spectrum use, interact with and promote the needs of individual public safety agencies, and ensure conformance with applicable technical and operational rules.[378] We further observed that the Public Safety Broadband Licensee has distinct abilities, in that it may assess usage fees to recoup its costs, can use its national level of representation to pass on the benefits of economies of scale for subscriber equipment and applications, and holds sole authority to approve, in consultation with the D Block licensee, equipment and applications for public safety users, and to permit Federal public safety agency use.[379]

180. In light of these similarities and differences, we asked whether there are certain elements of the existing regional planning committee functions that we should adopt for the Public Safety Broadband Licensee, and whether for those functions distinct from regional planning committees, we should adopt specific rules governing how the Public Safety Broadband Licensee would carry those out.[380] To the extent the Public Safety Broadband Licensee also serves a role as a partner with the D Block licensee (such as facilitating negotiations between the D Block licensee and state and local agencies for local build-outs), we asked how, if at all, the Public Safety Broadband Licensee's role as one half of the 700 MHz Public/Private Partnership should impact how we modify or clarify the respective responsibilities of the D Block licensee and the Public Safety Broadband Licensee moving forward.[381]

181. We also observed in the *Second Further Notice* that more specific limits may be required regarding the Public Safety Broadband Licensee's discretion to carry out its partner-related responsibilities.[382] We noted, for example, that the shared wireless broadband network elements adopted in the *Second Report and Order* required that the network infrastructure incorporate operational control of the network by the Public Safety Broadband Licensee "to the extent necessary" to ensure public safety requirements are met.[383] We reiterated that the underlying premise of the 700 MHz Public/Private Partnership was that the D Block licensee would be responsible for construction and operation of the broadband network.[384] We observed that allowing duplication of some or all of these operational functions by the Public Safety Broadband Licensee could render it a reseller of services, thus injecting an inappropriate "business" or "profit" motive into the Public Safety Broadband Licensee structure, and detracting it from the intended primary focus of the Public Safety Broadband Licensee.[385] Accordingly, we sought comment on whether to clarify that none of the responsibilities and obligations of the Public Safety Broadband Licensee, either as previously adopted or as possibly revised, would permit the Public Safety Broadband Licensee to assume or duplicate any of the network monitoring, operations, customer

[377] *Id.*

[378] *Id.*

[379] *Second Further Notice*, 23 FCC Rcd at 8091 ¶ 123.

[380] *Id.*

[381] *Second Further Notice*, 23 FCC Rcd at 8091-92 ¶ 124.

[382] *Id.*

[383] *Id.*

[384] *Id.*

[385] *Id.*

care, or related functions that are inherent in the D Block licensee's responsibilities to construct and operate the shared network infrastructure.[386]

182. We further sought comment on whether to expressly provide that neither the Public Safety Broadband Licensee nor any of its advisors, agents, or service providers may assume responsibilities akin to a mobile virtual network operator ("MVNO")[387] because such a role would be contrary to the respective roles and responsibilities of the D Block licensee and Public Safety Broadband Licensee regarding construction, management, operations, and use of the shared wireless broadband network, might unnecessarily add to the costs of the 700 MHz Public/Private Partnership, and might otherwise permit "for profit" incentives to influence the operations of the Public Safety Broadband Licensee.[388]

183. Comments. The PSST generally argued that it must be an "equal partner" in the 700 MHz Public/Private Partnership, and that "[b]ecause the FCC has made the PSST responsible for the public safety user experience on the SWBN [shared wireless broadband network], it also must provide the PSST with a mechanism that permits the PSST to fulfill that responsibility on an ongoing basis after negotiating the NSA."[389] The PSST explained that while it "accepts the FCC's view that the PSST should not have [] an active role in the 'business' of managing the public safety user experience on the SWBN," it "does not agree that the D Block licensee should have sole control over all of the traditional network service provider operations, including those associated with the spectrum for which the PSST is the licensee."[390] The PSST further argued that "[c]eding sole control over these important functions to the D Block licensee would seriously impair, not 'better enable,' the PSBL's ability to 'administer access to the national public safety broadband network by individual public safety entities, coordinate frequency usage, assess usage fees, and exercise its sole authority to approve equipment and applications for use by public safety entities.'"[391] The PSST asserted that "[i]t is clear to the PSST that for the PSST to 'administer' network access it will need some form of direct relationship with public safety users on the network."[392]

184. The PSST argued that "it can fulfill its responsibilities if it is considered to operate in a manner comparable to a 'cooperative' licensee."[393] According to the PSST, under this model, the "cooperative status permits a single entity to hold the authorization for spectrum that will be utilized by multiple users on a non-profit, cost-shared basis when each user is independently eligible to operate on the spectrum."[394] Additionally, according to the PSST, "[t]he cooperative approach should provide the PSST with a direct enforcement right to obtain redress on behalf of public safety users as well as a direct right to ensure that the highest levels of SWBN priority access are only used for public safety authorized purposes."[395]

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[386] *Id.*

[387] A mobile virtual network operator is a non-facility-based mobile service provider that resells service to the public for profit. *See* Implementation of Section 6002(B) of the Omnibus Budget Reconciliation Act of 1993, WT Docket No. 05-71, *Tenth Report*, 20 FCC Rcd 15908, 15920 ¶ 27 (2005).

[388] *Second Further Notice*, 23 FCC Rcd at 8092 ¶ 125.

[389] PSST Comments at 10.

[390] PSST Comments at 11-12 (*citing* 47 C.F.R. §§ 1.9010, 1.9020 and 90.1440).

[391] PSST Comments at 12 (*citing Second Further Notice* at ¶ 115; Appendix, Section II).

[392] PSST Comments at 12.

[393] PSST Comments at 14 (*citing* 47 C.F.R. § 90.179).

[394] PSST Comments at 14.

[395] PSST Comments at 14.

185. The PSST asserted that "the FCC already has determined that the PSST must have operational control of the SWBN to the extent required to ensure that public safety requirements are met, a responsibility that is critical during incident management."[396] The PSST acknowledged that "this can be accomplished without the PSST establishing Network Operating Centers ("NOCs") or other network elements that could be considered parallel to or duplicative of those maintained by the D Block licensee,"[397] but added that "the PSST's right to an appropriate level of control dictates that it must have the exclusive right to manage the assignment of the highest priority levels on the SWBN."[398]

186. The PSST also argued that it "must have an independent ability to monitor the D Block licensee's compliance with the FCC rules and with the terms of the NSA as they relate to public safety operations on the SWBN," which it further argued would involve monitoring "the D Block operator's performance on a real-time basis so that problems are identified and corrected, preferably before they impact public safety communications rather than after the fact."[399] The PSST clarified that "[a]lthough the D Block licensee will always have operational control of the SWBN, the PSST should have sufficient access to and certain rights regarding the D Block licensee's NOC and data centers to carry out the PSST's obligations, including implementing priority access for public safety users, if the PSST is not to have its own facilities."[400] According to the PSST, "[n]either the PSST nor the emergency responders who elect to join the network should have to rely entirely on self-policing and self-reporting by the D Block licensee to confirm that public safety needs are being met."[401] The PSST further asserted that "[i]t also is important that the PSST, as well as the D Block licensee, play a direct role in promoting widespread public safety usage of the SWBN."[402]

187. The PSST included proposed regulations with its Reply Comments that would implement many of its positions described above.[403] For example, under its proposed regulations defining the "Shared Wireless Broadband Network," the network would "[p]rovide for operational control of the network by the Public Safety Broadband Licensee, on terms and conditions agreed to by the Public Safety Broadband Licensee and the Upper 700 MHz D Block licensee, to the extent necessary to ensure that Priority Public Safety Users' expectations are met."[404] Under the proposed regulations, these terms and conditions would include the ability of the Public Safety Broadband Licensee and public safety users to

[396] PSST Comments at 15.

[397] PSST Comments at 15.

[398] PSST Comments at 16. The PSST further explained that while "overall control of these priority levels must reside with the PSST, [] individual priority assignments may be carried out, as they are today, at more local levels." *Id*. The PSST also asserted that it would need to play an "active role" in "[e]stablishing standards for the construction of a SWBN with specific features and services for the benefit of public safety," and "[n]egotiating arrangements for the purchase of equipment from vendors (under master agreements for the benefit of public safety users), and renegotiating these agreements on an ongoing basis to reflect the latest market developments." *Id*. at 9-10

[399] PSST Comments at 16. The PSST also contended that it "will need to be involved in and able to enforce the contracts between public safety users and the D Block licensee in order to ensure contract compliance and obtain redress on behalf of public safety users, without being reduced to an ineffectual committee preparing reports on NSA compliance." *Id*. at 10.

[400] PSST Comments at 16 n.30.

[401] PSST Comments at 16.

[402] PSST Comments at 17.

[403] *See* PSST Reply Comments, Attachment A.

[404] *See* PSST Reply Comments, Attachment A, at 9.

"[h]ave real-time monitoring and visibility into the network that is integrated with performance, SLA, and KPI reports as defined and specified in the NSA" as well as "real-time visibility into Shared Wireless Broadband Network service quality and network status relevant to the local agency or jurisdiction, including the ability for local Priority Public Safety Users to have real-time network status, site status, and alarm visibility for their geographic area."[405]

188. APCO argued that it would be inappropriate for the PSBL to act as a MVNO because such action "would add duplication and costs that could become a burden for both the PSBL and, more importantly, end users."[406] APCO observed that the MVNO model "also imposes responsibilities on the PSBL for which it is likely to be ill-equipped," and that "[t]o accept such a responsibility, the PSBL would need to rely heavily upon commercial contractors, and somehow provide sufficient oversight to ensure that the contractors are serving public safety's interests."[407] APCO further observed that "[b]uilding the required internal management and operational capability would also involve very substantial capital expenditures," for which the PSBL "would need to rely upon either debt extended by its contractors [] or substantial payment from the D Block licensee pursuant to the NSA (which would likely discourage bidders once again)."[408]

189. APCO argued, however, that the "PSBL does need to have an active role in the operation of the broadband network to ensure that it meets public safety's requirements."[409] APCO stated that "there needs to be a mechanism to oversee priority access and proper incident command and control for the capacity represented by the 10 MHz licensed to the PSBL."[410] More specifically, APCO argued that "the PSBL needs to move towards a management structure that monitors D Block licensee contract performance and service relations, without duplicating the D Block licensee's core function or neglecting the agencies and citizens the PSBL is charged to protect."[411] To achieve this objective, APCO proposed a specific list of tasks and services that it contended the PSBL needs the ability to perform.[412]

190. AT&T urged the Commission to "definitively declare that commercial partners will have operational control over the entire joint network, subject only to specific PSBL operational authority that the Commission clearly defines prior to the RFP process or a reauction."[413] AT&T contended that "[c]ommercial partners require day-to-day operational control over the entire network to ensure that commercial and public safety service offerings meet the high standards expected by commercial and public safety end users on a daily basis," adding that "commercial partners are likely also in the best position to perform this function, given their experience, expertise, and personnel and financial resources."[414] AT&T further contended that "[w]ithout assurance of commercial control over the

[405] *Id*. The proposed regulations further indicate that "[o]perational control, as agreed to between the Upper 700 MHz D Block licensee and the Public Safety Broadband Licensee in the NSA, shall include . . . [t]he authorities and permissions for Public Safety Broadband Licensee-trained incident management personnel to have real-time access to the Upper 700 MHz D Block licensee's primary and secondary Network Operations Centers (NOCs)." *Id*. at 10.

[406] APCO Comments at 34.

[407] APCO Comments at 34.

[408] APCO Comments at 34-35.

[409] APCO Comments at 35.

[410] APCO Comments at 35.

[411] APCO Comments at 35.

[412] APCO Comments at 35-37.

[413] AT&T Comments at 16. *See also* Reply Comments of AT&T at 17-18.

[414] AT&T Comments at 16-17.

network's operations, AT&T questions whether any interested commercial parties will participate in a RFP process or reauction."[415] To that end, AT&T requested clarification regarding our statement in the *Second Report and Order* that the Public Safety Broadband Licensee would have "operational control of the network to the extent necessary to ensure public safety requirements are met."[416] More specifically, AT&T argued that "[i]n order to assess the commercial viability of the Public/Private Partnership, potential commercial participants need the Commission to eliminate [any] ambiguity [on this issue] and to provide a concise definition of "operational control."[417]

191. AT&T further requested that the Commission clarify that "the PSBL has a responsibility to set priority levels and provision priority users on the public safety network," for which AT&T recommends following the model established by [the Department of Homeland Security's National Communications System] in the provisioning of [Wireless Priority Service]."[418] In addition, AT&T asserted that "decisions whether a certain public safety device or application should be permitted on the public/private network should rest primarily with the PSBL."[419] AT&T indicated that it "generally agrees" with the list of potential PSBL responsibilities proposed by APCO.[420] AT&T opposed the notion of allowing the Public Safety Broadband Licensee to act as an MVNO, arguing that allowing "the PSBL or its advisors operate as an MVNO or otherwise profiteer from the Public/Private Partnership will likely raise the costs of services for public safety users as well as discourage commercial participation in the Public/Private Partnership."[421]

192. Big Bend Telephone Company argued that the Commission "should not permit the Public Safety Broadband Licensee, or any of its advisors, agents, or service providers to provide commercial services as a 'mobile virtual network operator.'"[422] Big Bend further argued that permitting such action "would permit 'for profit' incentives to influence the operations of the Public Safety Broadband Licensee," which Big Bend argued would "prove detrimental to the viability of smaller and rural wireless carriers."[423] Big Bend also contended that smaller and rural wireless carriers "should have a reasonable expectation that the FCC's rules will not permit a heavily subsidized competitor – one that did not have to pay for its spectrum or network construction, and that enjoys preferred regulatory status - to compete in the market for commercial wireless services."[424] A number of other rural telecommunications carriers filed essentially identical comments.[425]

193. Ericsson asserted that "[a] substantial portion of that network (at a minimum, the radio access network, and in all likelihood, other network components as well) will be run, day-to-day, by the D Block licensee." Ericsson envisioned that the "PSBL will need to interact regularly with the D Block

[415] AT&T Comments at 17.

[416] AT&T Comments at 17 (*citing Second Report and Order*, 22 FCC Rcd at ¶ 405).

[417] AT&T Comments at 17.

[418] AT&T Comments at 17-18.

[419] AT&T Comments at 18.

[420] AT&T Reply Comments at 18.

[421] AT&T Comments at 21-22. *See also* AT&T Reply Comments at 16.

[422] Big Bend Comments at 3.

[423] Big Bend Comments at 3.

[424] Big Bend Comments at 3.

[425] *See* ACT Comments at 2-3; Smithville Comments at 2-3; PVTC Comments at 3; Van Buren Comments at 2-3; Wiggins Comments at 4; CTC Comments at 3; Ponderosa Comments at 2-3.

licensee to ensure that the needs of the public safety organizations using the national public safety broadband network are satisfied, within the technical and operational confines of the NSA and FCC rules."[426] To that end, Ericsson argued that "the D Block licensee would need to provide the PSBL with any reports needed to evaluate the effectiveness and proper operation of the priority access and preemption mechanisms."[427] Additionally, Ericsson argued that "the PSBL should be responsible for taking a leadership role in negotiations concerning the siting of facilities on lands owned or controlled by state and local governments, and regarding siting of facilities in cases where state and local government oppose the site."[428]

194. Nextwave asserted that "the PSST should be tasked with organizing, prioritizing, and addressing accordingly the varying broadband needs of the diverse public safety community it serves."[429] In particular, Nextwave recommended that "the FCC leave to the local and regional jurisdictions decisions with respect to standards-based technologies to suit their specific needs, but direct the PSST to provide guidance on coordination of spectrum usage, minimum network performance requirements, permissible standards-based technologies with which the networks must be built to comply, and end-to-end interoperability."[430] Furthermore, Nextwave suggested that "the FCC require the PSST, as licensee of the public safety broadband spectrum, to create and provide an Interoperability Plan to public safety entities for their reference in building regional networks."[431]

195. Council Tree contended that "the Public Safety Broadband Licensee should be required to operate as an accountable MVNO with respect to public safety users."[432] Council Tree argued that such action is necessary because "the MVNO will serve as the appropriate vehicle through which public safety users may commit to certain minimum volume purchase requirements,"[433] and "the MVNO structure provides a substantial service to the D Block licensee by taking on the administrative responsibility associated with meeting the unique service needs of public safety users."[434] Additionally, Council Tree argued that "[s]hifting responsibilities to an MVNO directed by the Public Safety Broadband Licensee also simplifies key elements in the NSA and should facilitate negotiation of the agreement."[435]

196. Discussion. As an initial matter, we do not propose any changes to the responsibilities of the Public Safety Broadband Licensee summarized above that were established by the *Second Report and Order*. Thus, the Public Safety Broadband Licensee will continue to be responsible for such activities as administration of access to the nationwide public safety broadband network by public safety entities, representation of the public safety community in negotiating the NSA with the D Block licensee(s), interaction with equipment vendors and approval of equipment and applications, and administration of the narrowband relocation process.

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[426] Ericsson Comments at 30.

[427] Ericsson Comments at 30.

[428] Ericsson Comments at 30.

[429] Nextwave Reply Comments at 8.

[430] Nextwave Reply Comments at 8-9.

[431] Nextwave Reply Comments at 9.

[432] Council Tree Comments at 21.

[433] Council Tree Comments at 21.

[434] Council Tree Comments at 22.

[435] Council Tree Comments at 22.

197. However, we tentatively conclude that further clarification as to the responsibilities and obligations of the Public Safety Broadband Licensee would help define the overall 700 MHz Public/Private Partnership model and provide greater certainty to both the Public Safety Broadband Licensee and potential bidders for the D Block license(s) regarding their respective roles. We begin with the premise that the responsibilities and obligations of the Public Safety Broadband Licensee do not include the Public Safety Broadband Licensee assuming or duplicating any of the day-to-day network monitoring, operations, customer care, or related functions that are inherent in the D Block licensee's responsibilities to construct and operate the shared network infrastructure.

198. In the context of the 700 MHz Public/Private Partnership model, we do not envision that the Public Safety Broadband Licensee would operate as an MVNO or that it would exercise actual day-to-day operational control over the shared broadband network. While the Public Safety Broadband Licensee is charged with administering access to the shared broadband network by public safety users, we view it as carrying out these functions through the establishment of priority access, service levels, and related requirements within the NSA process, as opposed to providing any form of ongoing day-to-day billing or customer care functions to public safety entities desiring to access the shared broadband network.

199. We agree with commenters who observed that allowing the Public Safety Broadband Licensee to duplicate some or all of the operational functions for which the D Block licensee, as the service provider, inherently is responsible, would effectively render the Public Safety Broadband Licensee a reseller of services, which could inject an inappropriate and impermissible "business" or "profit" motive into the Public Safety Broadband Licensee's structure.[436] Such duplication of functions also would unnecessarily increase the Public Safety Broadband Licensee's costs.

200. At the same time, we agree with commenters who observed that the Public Safety Broadband Licensee should have the ability to monitor the services provided by the D Block licensee(s) to ensure that priority access and other operational requirements (including the establishment of service levels and the authentication and authorization of public safety users) are being provided in accordance with the NSA's terms, and should be empowered to work with the D Block licensee to promptly correct any deficiencies. We expect that the Public Safety Broadband Licensee will be able to perform this function through review of monthly usage reports supplied by the D Block licensee(s), and that such monitoring will enable the Public Safety Broadband Licensee to work with the D Block licensee(s) to develop improved ways to meet the evolving usage needs of the public safety community. We also believe that the Public Safety Broadband Licensee can effectively carry out its monitoring role without requiring the D Block licensee to support real-time monitoring by the PSBL or to provide the PSBL with access rights to the D Block licensee's NOC and/or data centers.

201. We believe that the role of the Public Safety Broadband Licensee, as discussed in the *Second Report and Order* and as further clarified above, is fully consistent with the requirement under Section 310(d) of the Communications Act that it exercise *de facto* control over use of the public safety broadband spectrum. Although the Public Safety Broadband Licensee will not exercise day-to-day operational control of the shared broadband network, the Commission has previously stated that operational control of facilities is not a statutory requirement to establish control, so long as the licensee retains ultimate control over use of the licensed spectrum.[437] In this case, the Public Safety Broadband Licensee will exercise control over use of the public spectrum by defining and administering the terms of access and use of the spectrum, maintaining an active monitoring and oversight role based on the monthly

[436] *See*, *e.g.*, Big Bend Comments at 3.

[437] *See generally* Promoting Efficient Use of Spectrum Through the Elimination of Barriers to the Development of Secondary Markets, WT Docket 00-230, *Report and Order and Further Notice of Proposed Rulemaking*, 18 FCC Rcd 20604 (2003) (concluding that operational control of facilities was not a prerequisite for establishing that a licensee retained *de facto* control under Section 310(d) in the spectrum leasing context).

reports provided by the D Block licensee, and exercising its other responsibilities enumerated above and in the *Second Report and Order*. The Public Safety Broadband Licensee will also have the authority to act on information provided in the D Block licensee's reports, if necessary, by bringing a complaint or petition for declaratory ruling to the Commission.[438] This authority will enable the Public Safety Broadband Licensee to carry out its core responsibility to ensure compliance with Commission rules and policies by users of the public safety broadband spectrum.

202. Accordingly, we tentatively conclude that we should clarify the Public Safety Broadband Licensee's responsibilities with respect to "general administrator of access," as well as the requirement (codified in existing rule sections 27.1305(h) and 90.1405(h)) that the network incorporate "operational control" as follows. We propose that the D Block licensee(s) build into the shared broadband network infrastructure a capability to provide monthly usage reports covering network capacity and priority access so that the Public Safety Broadband Licensee can monitor usage and provide appropriate feedback to the D Block licensee(s) on operational elements of the network. We further propose that the Public Safety Broadband Licensee utilize these reports to carry out its role in administering access to the shared broadband network in consultation with local, regional and state public safety agencies. The Public Safety Broadband Licensee also may administer access in terms of establishing access priorities and service levels, authenticating and authorizing public safety users, approving equipment and applications for public safety end users of the network, and interacting with the public safety community to facilitate an understanding of the opportunities made possible by subscribing to the interoperable shared broadband network and the procedures for doing so.

6. Post-Auction Process for Establishing a Network Sharing Agreement

203. Background. In the *Second Further Notice*, the Commission sought comment on whether and how to modify the post-auction process, including provisions governing negotiations between a winning D Block bidder and the Public Safety Broadband Licensee for a Network Sharing Agreement. The Commission sought comment on whether modifications to the process would create greater incentives for the D Block winner and the PSBL to negotiate the terms of the NSA in good faith, while reasonably protecting their respective interests. In particular, comment was sought regarding what consequences following failure to negotiate an NSA would provide the best set of incentives for effective negotiation. For example, such consequences could include offering a D Block license to the next highest bidder, as well as possibly requiring the initial D Block winner to cover the PSBL's costs associated with the unsuccessful negotiations; or conducting a new auction, with or without the winner of the initial auction; or conducting a new auction with licenses no longer subject to the Public Private Partnership, with or without the winner of the initial auction and/or with parties previously excluded from the initial auction; and/or subjecting the D Block winning bidder to default payments, either dependent on or irrespective of its good faith in conducting the negotiations.

204. Discussion. In this section, we tentatively conclude that the public interest in achieving a nationwide interoperable public safety broadband network following bidding for alternative D Block licenses will be served best by making no provision at this time for lifting the Public Private Partnership conditions following such bidding. We further tentatively conclude that we should adopt a rule providing that if a winning bidder should for any reason not be assigned a license following an auction of D Block licenses subject to the Public Private Partnership Conditions, including due to a failure to negotiate an NSA, the Commission shall offer to the other bidder(s) with the next highest bid(s) on the license(s) any license that was not assigned. We direct the Wireless Telecommunications Bureau to specify the circumstances in which the Commission may make such an offer in the context of the final procedures adopted for any auction of D Block licenses.

205. Our separate tentative conclusion to offer multiple regional licenses for the D Block, in

[438] *See Second Report and Order*, 22 FCC Rcd at 15470 ¶ 528.

addition to a nationwide license, presents the possibility that separate NSAs may apply to separate licenses. We tentatively conclude that the Commission should review and, if in the public interest, may accept NSAs for some licenses, even if acceptable NSAs are not submitted with respect to all licenses.

206. We tentatively conclude that we should continue to provide for Commission resolution of any impasse between the parties negotiating any NSA. We further tentatively conclude that a winning D Block bidder shall not be subject to a default payment in the event there ultimately is no agreement on the terms of the NSA, provided that it accepts any Commission resolution of an impasse in the process of negotiating the NSA.

207. The unique requirement for the D Block that winning bidders to negotiate the terms of an NSA with the PSBL following bidding for the licenses but before being granted the license may produce circumstances not contemplated by the Commission's current rules for processing a winning bidder's license application. For example, the Commission's current rules do not contemplate denial of a winning bidder's application without finding the applicant is either disqualified or in default or both.[439] As discussed herein, however, there may be circumstances in which the Commission will not assign the license even though the winning D Block bidder has not defaulted and, but for the absence of an acceptable NSA, might otherwise be qualified to be licensed. Accordingly, we propose a rule specific to the D Block setting forth post-auction application procedures consistent with the tentative conclusions reached in this *700 MHz Third Further Notice of Proposed Rulemaking.*

208. We tentatively conclude that the current record does not demonstrate that any other alternatives for determining the terms of the NSA, either through processes modeled on a Request for Proposal mechanism or other proposals to finalize the NSA prior to an auction, will better serve the public interest than the Commission's initial proposal that the winning bidder(s) in an auction to license the D Block should negotiate the terms of the NSA with the PSBL. We seek comment on all the tentative conclusions with respect to the process for negotiating the NSA.

209. Finally, given the proposal to offer the D Block on a regional basis, and the other significant changes proposed herein, we seek comment on whether we should adopt further changes to the process for establishing the NSA.[440] For example, we seek comment on whether we should reduce or modify the current negotiation reporting requirements, which obligate the Public Safety Broadband Licensee and the D Block winning bidder to jointly provide detailed reports on a monthly basis on the progress of the negotiations.

a. Action if All or Some D Block Winning Bidders Are Not Assigned Licenses

210. Comments. Several parties, predominantly public safety entities, contend that any Commission commitment to license D Block without the Public Private Partnership under any subsequent circumstances might undermine the chances for a successful Public Private Partnership. Specifically, APCO notes that providing for subsequent action on the D Block in the event there is no winning bidder after an auction subject to the Public Private Partnership may create incentives for parties that prefer those other alternatives in order to prevent licensing pursuant to the Public Private Partnership.[441] NATOA *et al*. concurs, as does PSST.[442] TeleCommUnity asserts that any such provision "may guarantee a failed second auction" to license the D Block pursuant to the Public Private Partnership.[443] Equipment

[439] Cf. 47 C.F.R. § 1.2109(c).

[440] 47 C.F.R. § 27.1315.

[441] APCO Comments at 40.

[442] NATOA *et al.* Comments at 23, PSST Comments at 43.

[443] TeleCommUnity Comments at 15.

manufacturer Ericson echoes these public safety commenters.[444]

211. With respect to the particular scenario in which a winning bidder is unable to negotiate a Network Sharing Agreement, PSST supports offering the license to a next highest bidder.[445] Ericson also advocates this approach, as the most direct way to achieve the benefits of the Public Private Partnership, despite the initial winner's failure to negotiate an NSA. [446]

212. In opposition, commercial provider MetroPCS, which advocates abandoning the Public Private Partnership model outright, insists that at a minimum the Commission should provide for an immediate subsequent auction to license the D Block without the Public Private Partnership in the event an auction subject to the Public Private Partnership does not succeed.[447] MetroPCS advocates that the Commission license the D Block without the Public Private Partnership by assigning licenses by CMA and without accepting package, or combinatorial, bids.[448]

213. Discussion. We tentatively conclude that the public interest in achieving a nationwide interoperable public safety broadband network following the next auction of D Block licenses will be served best by making no provision for lifting the Public Private Partnership conditions at this time. Experience gained from an attempt to establish a successful Public Private Partnership following the next auction may help chart the future course of the D Block spectrum. Moreover, achieving a successful nationwide interoperable public safety broadband network is more important than accelerating the licensing of the D Block.

214. A number of commenters support offering the D Block license to the next highest bidder following any failure to negotiate an NSA. These comments focus on providing a winning D Block bidder with the best incentives to negotiate an NSA. However, the public interest in achieving a nationwide interoperable public safety broadband network as soon as possible also will be furthered if, in the event the Commission determines it will not assign a license or license(s) to a winning bidder for any reason, such as the winning bidder's default for failure to make post-auction payments or disqualification due to failure to meet the Commission's requirements of a D Block licensee, the Commission offers the relevant license(s) to the other bidder(s) that placed the next highest bid on the same license(s). Consequently, we consider more generally under what circumstances, if any, the Commission may offer a license to another bidder without conducting a second auction.

215. Pursuant to its current rules, the Commission has authority to offer licenses to bidders with the next highest bids without re-opening bidding but only in auctions in which a disqualified winning bidder's bid could not have helped determine the winning bids on other licenses. The Commission's rules currently provide discretion to make such an offer in Commission auctions without package bidding, while precluding it from doing so in auctions with package bidding.[449] The

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[444] Ericsson Comments at 32.

[445] PSST Comments at 42.

[446] Ericsson Comments at 32.

[447] MetroPCS Comments at 7.

[448] MetroPCS Comments at 20-23.

[449] *See* 47 C.F.R. § 1.2109(c) (in the event a winning bidder "is found unqualified to be a licensee . . . the Commission may . . . offer [the license] to the other highest bidders (in descending order) at their final bids.") We clarify here that the imposition of liability for a default payment, referenced in the first sentence of Section 1.2109(c), is not a precondition to the Commission offering the license to the next highest bidder. Rather, once a winning bidder is found "unqualified," which in the context of the D Block would include a finding that the winning bidder has been unable to negotiate a Network Sharing Agreement with the PSBL that the Commission will accept, (continued….)

Commission's rules make this distinction because in an auction with package bidding, absent the disqualified bid(s) the next highest bid(s) of other bidder(s) for the same license(s) or package may not have become a winning bid and a group of other bids for different packages of licenses might have become the winning bids. In that case, the disqualified bidder's bid helped determine not only the winner of the licenses subject to the disqualified bid but also the winner of other licenses.

216. Given the public interest at stake in the D Block being used to deploy rapidly a nationwide interoperable broadband network for public safety use, we tentatively conclude that the Commission should have authority to offer a license to the next highest bidder if a winning bidder in an auction of alternative D Block licenses subsequently defaults or is disqualified. The offer will be for the same license won by the initial winning bidder, so that any offer for a PSR license will be made to the next highest bidder for a license using the same technology platform, even if higher bids were placed on a license for the same PSR using a different technology platform or a set of bids for alternative licenses would have won absent the subsequently defaulted or disqualified bid. Moreover, we tentatively conclude that the Commission should be able make such an offer whether bidding on alternative licenses was conducted with or without package bidding. We will adopt a rule specifically for the D Block incorporating these provisions.

217. We reach this tentative conclusion while recognizing that simultaneously offering alternative licenses for the D Block has similarities to a package bidding auction, even absent package bidding as defined in the Commission's rules.[450] For example, if bidders on regional licenses collectively outbid a bidder for the alternative nationwide license, it is possible that the bid on one of those regional licenses affected the outcome for all the other regions by making the aggregate bid for the regional licenses greater than the bid for the nationwide license.[451] However, given the importance of rapidly licensing the D Block, we tentatively conclude that, following the simultaneous offer of alternative D Block licenses, whether or not package bidding is available, if the Commission determines that it will not assign any license(s) to an initial winning bidder, the Commission may offer the same license(s) to the next highest bidder, even if a different set of licenses covering the same population would have had a higher aggregate bid in the absence of the initial winning bid. We seek comment on our tentative conclusion and whether any alternative would better serve the purposes for making such offers.

218. We tentatively conclude that it would not be appropriate to either require the Commission to offer the license to the next highest bidder or to require the next highest bidder to accept the license. The Commission should retain flexibility to utilize any information obtained from the efforts of an initial D Block winning bidder and the PSBL to negotiate an NSA, which might suggest a superior course to simply offering the license to the next highest bidder. Similarly, not requiring the next highest bidder to accept the license provides that party with the flexibility to consider information developed during the initial negotiations, which may avoid further unsuccessful negotiations for the NSA. We seek comment on these tentative conclusions.

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the Commission then "may . . . offer [the license] to the other highest bidders," regardless of whether the winning bidder is liable for a default payment.

[450] *See* 47 C.F.R. §1.2103(b).

[451] This will not always be the case. A post-auction disqualification of one winning bidder in an auction of alternative licenses or a package bidding auction may not affect other winning bidders for other licenses. For example, bidders for a group of single licenses might have prevailed against a bid on an alternative nationwide license – or package of single licenses – even if one of the original winning bids is replaced by a second highest bid on a single license. The Commission's standard package bidding rule applies a bright line for all package bidding auctions, regardless of the particular bids in the auction.

b. Separate NSAs for Different Licenses

219. Given our tentative conclusion to offer regional licenses for the D Block, we also must consider whether all the winning bidders for D Block licenses must successfully negotiate NSAs, either jointly or individually, in order for any of them to be licensed, or whether the Commission may license a subset of winning bidders based on their success in negotiating NSAs notwithstanding the inability of other winning bidders to do so. We tentatively conclude that the Commission may accept NSAs that are negotiated between the PSBL and a subset of winning bidders. When negotiating NSAs with winning bidders in a subset of areas to be licensed, the PSBL should take into account the flexibility needed in the future to meet the needs of other unlicensed areas. This should prevent unnecessary limitations being imposed on future NSAs for unlicensed areas as a result of NSAs for areas licensed first. We further note that the Commission may take such concerns into account in determining whether to accept NSAs in areas where the winning bidder and the PSBL are able to come to agreement.

c. Liabilities of D Block Winning Bidders That Fail to Negotiate an NSA

220. Almost all commenters addressing whether to assess a default payment on a D Block winner that fails to negotiate an NSA would, at least in some circumstances, eliminate the default payment in the event a winning bidder is unable to negotiate an NSA. PSST believes that replacing the default payment with an automatic offer to the second highest bidder will serve the purposes underlying the Commission's default payment rule.[452] APCO contends that "[a]bsent bad faith, the D Block auction winner should not pay a substantial financial penalty if NSA negotiations fail (though some cost should be imposed to encourage serious good faith negotiations)."[453] While NPSTC believes that the default payment rule, like a reserve price, can serve to help ensure that D Block participants possess the financial, technical and managerial resources to perform responsibly, NPTSC believes that the Commission should provide sufficient assurance through other means, in which case the default payment can be reduced or removed.[454] NATOA *et al*. acknowledge the difficulty that large default payments may create for potential D Block applicants but stress the importance that any winning D Block bidder that does not negotiate in good faith should face "significant" penalty or forfeiture.[455]

221. AT&T proposes that a winning bidder should only be subjected to default payments if it acted in bad faith and that it should enjoy a presumption of good faith.[456] In addition, AT&T suggests that the Commission stipulate that any proposal satisfying minimum requirements delineated by the Commission would be deemed per se to be in good faith.[457] Council Tree Communications agrees that absent bad faith, no default payment should be required.[458] Northrop Grumman asserts that the Commission should relieve any winning bidder that negotiates the NSA in good faith from any default liability in the event no agreement can be reached, but does not discuss the standard for determining

[452] PSST Comments at 42.

[453] APCO Comments at 38.

[454] NPSTC Comments at 10.

[455] NATOA *et al.* Comments at 22.

[456] AT&T Comments at 23.

[457] AT&T Comments at 23.

[458] Council Tree Comments at 17. It asserts that if, however, the Commission retains the default payment in all circumstances, then only AT&T, Sprint Nextel, T-Mobile, and Verizon Wireless should be subject to its provisions. Council Tree Comments at 20.

"good faith."[459]

222. MetroPCS, however, would retain the default payment for a winning D Block bidder that fails to negotiate an NSA, apparently regardless of the bidder's good faith.[460]

223. Discussion. We tentatively conclude that if the Commission dismisses a winning bidder's long-form application solely for the lack of a Commission-approved NSA, a winning D Block bidder should only be subject to a default payment if it chooses not to accept the Commission's resolutions to any and all impasses in the process of negotiating an NSA.[461] Accordingly, if the Commission does not mandate a resolution to an impasse for any reason, or the PSBL refuses to accept a Commission resolution after the D Block bidder does so, the winning D Block bidder will not be subject to a default payment. Given the importance of developing a nationwide interoperable broadband network usable for public safety, the Commission will attempt to resolve any disputes between a winning D Block bidder and the PSBL with respect to the terms of the NSA. The Commission will use its discretion to determine how best to take into account the winning D Block bidder's business plan, as well as the requirements of public safety users, when mandating a resolution. The winning D Block bidder will be subject to a default payment if it refuses to accept any resolution mandated by the Commission. In the event that the Commission does not mandate a resolution, or if the D Block winner accepts the Commission's resolution but the PSBL declines to do so, the D Block winning bidder will not be subject to a default payment. Thus, a D Block winning bidder only will be exposed to default payment liability from a negotiation failure if the Commission mandates a resolution that the D Block winner chooses not to accept. The D Block winner's subjective "good faith" or "bad faith" will not play a role in determining default payment liability. We tentatively conclude that this standard should sufficiently protect D Block bidders against any risk that the PSBL has requirements for the NSA that cannot be reasonably accommodated as part of the D Block winner's business plan. Employing a sweeping "good faith" exception to the application of our default rule as advocated by some commenters would place the Commission in the untenable position of having to evaluate the D block winning bidder's motives and business judgments, which could significantly delay the NSA resolution process. Instead, by placing the ultimate decision of acceptance of the negotiated NSA or default in the hands of the D Block winning bidder, it will have the ability to weigh its choices and reach a determination of commercial viability.

224. Although we tentatively conclude that we should not use a "good faith" standard in connection with imposing liability on D Block winning bidders based solely on a failure to negotiate an NSA, we ask commenters whether there is another reasonable alternative to our proposal to impose liability based on whether a D Block winning bidder chooses to accept the Commission's resolution of any negotiation disputes. Further, we seek comment on any solutions to the difficulties of applying a "good faith" standard. We also sought comment on whether any winning bidder unable to negotiate an NSA with the PSBL that was acceptable to the Commission should be required to pay the PSBL's costs arising from the unsuccessful negotiations. We tentatively conclude that we should not impose such a requirement. While it might immunize the PSBL against otherwise unnecessary expense, the overall impact on the D Block winning bidders' incentives to negotiate would be minimal. Finally, the administrative process of accounting for expenses directly related to the negotiation might needlessly complicate the negotiation process.

[459] Northrop Grumman Comments at 9.

[460] MetroPCS Comments at 34.

[461] The Commission's competitive bidding rules and precedents governing post-auction defaults would apply to bidders for D Block licenses in other contexts, *e.g.*, failure to make post-auction payments, failure to file an acceptable long-form application, etc.

d. NSA Negotiation Process

225. The few comments directly addressing the negotiating process within the context of the Commission's proposal for negotiation of an NSA between the D Block winning bidder and the PSBL are divided on the Commission's role. According to APCO, "it is important that the FCC continue to be the final arbiter of disputes."[462] Northrop Grumman, in contrast, argues that the Commission should assure a winning D Block bidder a "way out" by eliminating any binding arbitration of disputes with the PSBL when negotiating the NSA.[463]

226. The City of Philadelphia contends that "the Commission should require the PSBL to establish and delegate authority to regional entities comprised of public safety agencies to negotiate terms of the NSA that affect their operations, including commercial use of public safety spectrum, priority access for public safety communications, and preemption in cases of local or regional emergency."[464]

227. Discussion. We tentatively conclude that we should continue to provide for final Commission resolution of any impasse between the parties negotiating the NSA. While we concur with the view that winning D Block bidder(s) should have a "way out" without the imposition of liability in the event that it proves impossible to negotiate an acceptable NSA, the appropriate "way out" is to provide for Commission to determine the final resolution of any dispute in connection with the negotiation of the NSA, including, should the Commission find it in the public interest, requiring the parties to accept specified terms resolving the dispute. The Commission's resolution will be final. We note that should the Commission conclude that it is unable to arrive at a resolution that the Commission believes is reasonable to require the parties to adopt, our tentative conclusion is that we will not impose default payment obligations on the winning D Block bidder. In short, a winning D Block bidder unable to reach agreement with the PSBL need only prove its case to the Commission in order to be relieved of any liability for failure to negotiate the NSA. We think this "way out" provides the best balance of incentives to negotiate the NSA in good faith, rather than leaving the parties free to reject attempts at resolving any disputes.

228. With respect to the issue of involving local entities in the negotiation of the NSA, we disagree with Philadelphia's proposal that the PSBL should delegate authority to regional or local authorities to negotiate terms with the D Block licensee. One of the primary roles of the PSBL is to serve as the single public safety representative for purposes of negotiating the NSA. Permitting multiple public safety parties to conduct simultaneous NSA negotiations with the D Block licensee would be inefficient and unwieldy, and would detract from the ultimate goal of achieving a nationwide interoperable broadband network for the entire public safety community. At the same time, the PSBL must carry out its responsibility to negotiate the NSA in a manner that is broadly representative of the public safety community. Accordingly, we tentatively conclude that, while it would be contrary to the PSBL's primary NSA negotiation responsibility to allow individual public safety entities to negotiate directly with the D Block auction winner(s), the PSBL must reasonably afford and accommodate local public safety input into its deliberations, and in doing so, balance local needs with the rules and policies ultimately adopted in this proceeding. Moreover, the limitation on negotiation by local agencies does not preclude them from contributing to the construction of the network with financial or other resources where they are able to do so. Thus, we tentatively conclude that local public safety agencies, the PSBL, and the winning bidder, where they are able to agree to particular terms for local contribution to the network that expand upon a baseline agreement, will be free to do so and incorporate those terms within the larger NSA.

[462] APCO Comments at 38.

[463] Northrop Grumman Comments at 9.

[464] Philadelphia Comments at 3-4.

e. RFPs and other alternatives for determining NSA terms

229. Background. In the *700 MHz Second Further Notice*, the Commission sought comment on whether a request for proposal (RFP) approach in conjunction with an auction might serve to establish the terms of the Network Sharing Agreement. More specifically, the Commission sought comment on whether to conduct an auction and then have a number of high bidders submit proposals in response to an RFP outlining the needs of the PSBL or, alternatively, whether to issue an RFP outlining public safety needs, then use one of the proposals submitted in response to establish rules on the terms of an NSA, and finally conduct an auction open to all parties interested in complying with those terms.

(i) RFP Approaches

230. Comments. Televate proposes an approach along the lines of the Commission's first RFP-related suggestion. More specifically, Televate proposes that the Commission accept proposals to satisfy public safety needs from all bidders willing to meet a minimum bid of $150 million and then score the proposals based on the weight given to various proposal features, including the bid amount.[465] The applicant with the highest score would then negotiate the final NSA details with the PSBL.[466] As part of its proposal for licensing the D Block, Televate proposes that bidders unable to negotiate an NSA would not be subject to a penalty.[467]

231. NTCH, a PCS provider and tower development company, proposes an RFP-related approach roughly along the lines of the Commission's second suggestion. NTCH suggests that would-be "network managers" negotiate alternative NSAs with the PSBL and subsequently applicants for licenses would place bids on licenses, specifying with which of the potential NSAs the bidder will comply.[468] High bids for licenses complying with the same NSA would be aggregated and compared with aggregated high bids for licenses complying with the terms of other NSAs. The NSA receiving the highest aggregate amount of license bids would win. The network manager for that NSA would undertake to build out any licenses not assigned to other parties based on the bidding.[469]

232. Leap proposes that the Commission use a contracting process between public safety users and the D Block licensee to determine what network requirements the D Block licensee will satisfy beyond those required by the Commission's commercial rules. Leap appears to advocate that the Commission modify its standard 700 MHz rules by imposing a requirement that the D Block licensee make its network available to public safety, via the PSBL, and negotiate in good faith with public safety users, via the PSBL, regarding any network improvements that the public safety users may require, with the cost of such improvements to be financed by the public safety users.[470]

233. AT&T, Verizon Wireless, and others promote a non-auction RFP approach to achieving the goal of an interoperable nationwide network.[471]

234. Discussion. As discussed elsewhere in this Third Further Notice, we tentatively conclude that the detailed Public/Private Partnership proposal set out in this Third Further Notice remains the best option to achieve nationwide build-out of an interoperable broadband network for public safety entities,

[465] Televate Comments at 5.

[466] Televate Comments at 5.

[467] Televate Comments at 6.

[468] NTCH Comments at 5.

[469] NTCH Comments at 5.

[470] Leap Comments at 12-13.

[471] *See, generally,* AT&T Comments; Verizon Wireless Comments.

given the current absence of legislative appropriations for this purpose and the limited funding available to the public safety sector.[472] We find that the RFP proposals submitted by parties in the record are not as likely to sustain the Commission's commitment to achieving a nationwide interoperable broadband network that meets public safety needs.

235. For instance, we tentatively conclude that Televate and NTCH have not demonstrated that their proposals are workable in their current form. For example, Televate's proposal, while generally describing the relative percentage weight to be applied to different portions of bidder proposals, does not provide any guidance on the difficult question of how to actually score each proposal. With respect to NTCH's proposals, we are not persuaded that the Public Safety Broadband Licensee will be able to negotiate final terms of multiple NSAs with various network operators in the absence of the actual licensees who are to build and construct the ultimate network. Accordingly, any advantages these proposals might have are hypothetical and insufficient for us to adopt them in place of the existing structure of licensing the D Block and having the NSA determined by negotiation between winning bidder(s) and the Public Safety Broadband Licensee.

236. Finally, we tentatively conclude that Leap's proposal offers insufficient assurance that the D Block licensee will in fact negotiate terms that will result in an interoperable broadband network that meets the needs of public safety on a nationwide basis. The most likely outcome of adopting Leap's proposal seems to be a nationwide interoperable commercial network supplemented by a patchwork of regional arrangements meeting the needs of public safety to the extent that local or regional public safety users are able to finance network modifications required to meet their needs. Given that the entire premise of the Public Private Partnership is that public safety users lack sufficient financing to meet their needs, we tentatively conclude that Leap's proposal will not serve the public interest.

(ii) Alternative Commenter Proposals

237. Comments. In addition to RFP approaches, several commenters propose alternative approaches to establishing an NSA that diverge from the Commission's initial proposal that a winning D Block bidder and the PSBL negotiate an NSA after an auction to license the D Block. The Mercatus Center at George Mason University proposes that the NSA be negotiated prior to auctioning the license, "through a negotiated rulemaking," with the Commission establishing a "negotiation committee composed of the current members of the PSBL and the representatives from potential bidders in the auction."[473]

238. United States Cellular argues that the PSBL, in conjunction with the public safety service providers, should establish the NSA prior to auction, subject to amendments thereafter.[474] In this context, with the NSA established pre-auction, United States Cellular favors subjecting any D Block winner that does not execute an NSA to the Commission default payment rules.[475]

239. Discussion. We tentatively conclude that the public interest in achieving a nationwide interoperable broadband network would be best served by accepting bids for D Block licenses prior to negotiating the terms of the NSA. We therefore decline to adopt these alternative proposals for

[472] We note that AT&T and Verizon Wireless state that their proposals conflict with our prior determination in the *Second Report and Order* that Section 337 of the Communications Act requires that we license spectrum allocated for commercial purposes in the upper 700 MHz band (which includes the D Block) by competitive bidding, and that AT&T asserts that Congress would be willing to revise the statute to permit an alternative approach. *See* AT&T Comments at 7; *see also* Verizon Wireless Reply Comments at 2.

[473] Mercatus Comments at 3.

[474] US Cellular Comments at ii-iii.

[475] US Cellular Comments at 21.

determining the terms of the NSA prior to auction. As reflected in the Draft Network Sharing Agreement accompanying this *Third Further Notice of Proposed Rulemaking,* with the revised rules proposed herein, we provide considerable additional certainty as to the "baseline" terms of the NSA, rendering full negotiation of the NSA in advance of auction unnecessary. Thus, all key baseline requirements to be covered by the NSA have been either defined or identified prior to auction, thereby providing a level of certainty to prospective bidders and ensuring uniformity and consistency among regional networks in the event regional licenses ultimately are implemented. While any given bidder for a D Block license would prefer to have all the terms of the NSA known prior to making its bid, we have tentatively concluded that, with respect to additional matters to be covered by the NSA, negotiation between a winning bidder and the PSBL will be the most effective means to achieving the best result. Terms that are not essential to the successful operation of an NSA may nevertheless be important to the viability of one bidder's business plan—while irrelevant to another. Predetermining such NSA terms prior to conducting an auction risks precluding many potential applicants, as well as denying the winning bidder flexibility that may be essential to achieving a nationwide interoperable broadband network that meets the needs of public safety. We seek comment on our tentative conclusions.

7. Auction Issues

240. Background. In the *700 MHz Second Further Notice*, the Commission sought comment on four specific issues related to how to conduct an auction to license the D Block subject to the Public Private Partnership. In particular, the Commission requested that commenters address (1) whether to restrict eligibility of entities to participate in the D Block auction based on their access to other 700 MHz spectrum; (2) how to determine any reserve price in such an auction; (3) whether to adopt an exception to the impermissible material relationship rule for determination of designated entity eligibility; and (4) whether we should modify the auction default payment rules. In addition, the Commission solicited comment on whether there were any other changes that should be made to the standard competitive bidding rules with respect to an auction to license the D Block.

241. Summary. In this section, we reach several tentative conclusions with respect to issues related to the next auction to license the D Block. We have tentatively concluded in this *Third Further Notice of Proposed Rulemaking* that licenses subject to three alternative provisions regarding the technology platform with which the license(s) can be used should be offered. The three alternatives are as follows: a nationwide license with which the winning bidder may use a technology platform of its choice and two types of regional licenses, one in which the licenses are to be used with LTE technology and a second in which the licenses are to be used with WiMAX technology. We tentatively conclude that the Commission will determine which of these alternative licenses to assign based on the results of an auction in which all of the licenses are offered simultaneously.

242. Furthermore, we tentatively conclude, in light of our primary goal of facilitating the development of a *nationwide* interoperable shared broadband network for the public-private partnership, that it is in the public interest to award licenses to the highest bidder(s) for the license(s) in the technology platform alternative for which license(s) receiving bids cover the greatest aggregate population, provided that at least half of the nation's population is covered. If the provisionally winning bids do not cover at least half of the nation's population, the auction will be cancelled and no D Block licenses will be awarded based on the results of the auction. Thus, the high bid on the nationwide, technology platform alternative would be the provisionally winning bid over any aggregate bid(s) covering less population in the two sets of regional licenses until there are bids on all regions in at least one of the alternatives. In addition, if there are high bids for license(s) in more than one of the alternatives covering equal population, subject to the minimum coverage requirement, licenses will be awarded to high bidder(s) for license(s) in the technology platform alternative that receives the highest aggregate gross bid(s). Finally, to promote competition during the bidding for licenses covering as much population as possible, we tentatively conclude that we should direct the Wireless Telecommunications Bureau to establish auction procedures that will encourage bidding on licenses covering as much population as possible. For instance, with that goal in mind, we intend that provision be made to reduce minimum opening bids on

unsold regional licenses during bidding. In addition, in furtherance of our goal of achieving the widest possible population coverage, we tentatively conclude that package bidding on the sets of regional licenses would be in the public interest and that we should direct the Wireless Telecommunications Bureau to establish procedures for package bidding for this purpose.

243. In addition, the tentative conclusions we reach on issues raised in the *700 MHz Second Further Notice of Proposed Rulemaking* all reflect our determination that the public interest in achieving a nationwide interoperable broadband network that meets the needs of public safety can best be promoted by auction provisions that will increase the likelihood of active participation in an auction and competition for the licenses. Accordingly, we tentatively conclude that we should not adopt any restriction on the eligibility to bid for D Block licenses by any entity otherwise eligible to be a D Block licensee based on its spectrum holdings, whether in the 700 MHz band or any other band. We also tentatively conclude that we should direct the Wireless Telecommunications Bureau to not adopt a reserve price greater than any minimum opening bid or bids. We further tentatively conclude that we should codify the substance of the previously granted waiver of the impermissible material relationship rule with respect to designated entity eligibility in connection with the D Block. As discussed in connection with the process for establishing the NSA, we tentatively have concluded the only change needed with respect to our default payment rules for purposes of the D Block is a modification that limits application of the default payment rule to specific circumstances following the failure to negotiate an NSA with the PSBL that is acceptable to the Commission. Finally, for a variety of reasons, we tentatively conclude that we should not make any of the additional changes to our competitive bidding rules proposed by commenters. We seek comment on all these tentative conclusions.

a. Determining Geographic Area and Platform Technology Through Auction

244. We tentatively conclude that rather than require that applicants offer service nationwide or that winners of regional licenses must use a predetermined technology platform, it is in the public interest to offer simultaneously at auction alternative licenses, specifically a single national license for use with a technology platform of the licensee's choice and regional licenses for use with one of two specific technology platforms. Under this proposal, D Block license(s) would be awarded to the highest bidder(s) for license(s) in the technology platform alternative (i.e., either the nationwide license or one of the sets of regional licenses) for which there are high bid(s) on license(s) covering the greatest aggregate population, subject to conditions of grant, including long-form license application processing. In the event that there is a tie in the greatest aggregate population covered by licenses with high bids in more than one of the alternatives,[476] we would award license(s) to the high bidders for license(s) in the alternative that receives the highest aggregate gross bid(s). Furthermore, we tentatively conclude that the Wireless Telecommunications Bureau should establish, as part of its pre-auction process, specific procedures to implement such an auction, including provisions for reducing minimum opening bids on regional licenses, that will promote bidding on licenses covering as much population as possible, and specific procedures to make available package bidding for groups of regional licenses using the same technology platforms.

245. By offering alternative licenses at auction simultaneously, the Commission can use the auction results to determine which license(s) will facilitate coverage of the maximum population by the nationwide interoperable shared broadband network for the public-private partnership. Specifically, the

[476] For purposes of determining the extent of population covered by licenses with high bids, the Commission would treat the license for the Gulf of Mexico PSR as having population. Thus, a bid on the nationwide license would cover a greater aggregate population than bids on a set of regional licenses that covered all PSRs other than the Gulf of Mexico PSR. Similarly, bids on one set of regional licenses that include a bid on the Gulf of Mexico PSR license will cover a greater aggregate population than bids on the second set of regional licenses covering the same population but without a bid on the Gulf of Mexico PSR license.

Commission proposes to offer simultaneously licenses with three alternative conditions regarding the technology platform that may be used by the licensee: "Alternative (1)," a nationwide license with the technology platform to be determined by the winning bidder; "Alternative (2)," a set of regional licenses for use with the LTE technology platform; and "Alternative (3)," a set of regional licenses for use with the WiMAX technology platform. Our goal is to provide for an auction in which applicants could place bids for license(s) covering the geographic area of their choice (nationwide and regional) and subject to specific provisions regarding the required technology platform. More specifically, we seek to provide certainty to bidders for regional licenses about which technology platform would be required if they become winning bidders. Thus, we tentatively conclude that we should enable an auction in which applicants can place bids that represent the values they assign to licenses for the alternative geographic areas and alternative technology platform requirements described above.

246. In furtherance of our primary goal of promoting the widest possible population coverage by D Block license(s) subject to the public-private partnership conditions, we tentatively conclude, as an initial matter, that we will not award any licenses unless the total population covered by licenses with high bids meets or exceeds fifty percent (50%) of the U.S. population. Setting the requirement at half of the population should help assure that sufficient licenses are assigned after the next auction to facilitate the ultimate success of a nationwide interoperable broadband network for public safety. We will direct the Wireless Telecommunications Bureau, as part of its pre-auction process, to describe how this requirement will be implemented in the context of the final auction procedures. If provisionally winning bids do not meet this requirement, the auction will be cancelled and no D Block licenses will be awarded based on the results of the auction.

247. We further tentatively conclude that, if the fifty percent (50%) population threshold is met, winning bidders will be determined according to the following criteria. If there is no nationwide bid and there are not high bids on all regional licenses in either set, the bidder(s) with high bid(s) on the D Block license(s) in the technology alternative covering the greatest aggregate population will become the winning bidders after the close of bidding. Similarly, if there is a nationwide bid but not high bids on all licenses in either regional set, the bidder for the nationwide license will become the winning bidder by covering the greatest aggregate population. In the event that there is a bid on the nationwide license and on all licenses in either regional set, the set of licenses with the highest aggregate gross bid(s) will become the winning bidder(s). Similarly, in the event that there is no nationwide bid and the greatest aggregate population is covered equally by the high bids in the two sets of regional licenses, the high bidder(s) for license(s) in the set with the highest aggregate gross bid(s) will become the winning bidder(s). Thus, we will look first to population coverage to determine the winning set of licenses, and to the highest aggregate bid amounts only if the population coverage is equal.[477]

248. We further tentatively conclude that the Wireless Telecommunications Bureau should establish auction procedures that will encourage bidding on licenses covering as much population as possible, including procedures to reduce minimum opening bids on unsold regional licenses during bidding. In particular, we tentatively conclude that the Bureau should lower certain minimum opening bids to the levels set out below if either of the following two triggers is tripped.

249. First, if there is a bid for the nationwide license, neither alternative set of regional licenses has received bids on all 58 licenses, and the sum of the provisionally winning bids for either set of regional licenses is greater than the amount of the nationwide license bid, then the Bureau will lower the minimum opening bids for the regional licenses that do not have bids. Second, if there is not a bid for

[477] For purposes of determining the extent of population covered by licenses with high bids, the Commission would treat the license for the Gulf of Mexico PSR as having population. Thus, if two sets of licenses otherwise cover the same aggregate population and only of the license sets includes the Gulf of Mexico PSR, the set of licenses that includes the Gulf of Mexico PSR will be the winning set, regardless of which set has the highest aggregate bid amount. The nationwide license includes the Gulf of Mexico PSR.

the nationwide license and there are bids in either set of regional licenses that cover at least half the nation's population, then the Bureau will lower the minimum opening bids for the regional licenses that do not have bids.

250. In particular, in these circumstances, we propose that the Bureau would lower the relevant minimum opening bids by setting new minimum opening bids for licenses without bids at $0.005 per megahertz per population (MHz-pop). If either of the regional licenses for the Gulf of Mexico does not have a bid, its minimum opening bid will be reduced to $2,500. Under this proposal, the Bureau would not further reduce minimum opening bids during the auction.

251. We also seek comment on alternative triggers for the reduction of minimum opening bids. For instance, we seek comment on whether, absent a bid on the nationwide license, there is another level at which the aggregate bids for either set of regional licenses should trigger a reduction in minimum opening bids for regional licenses without bids.

252. We seek comment on all of these tentative conclusions and on whether such an auction process will best serve the public interest in achieving a nationwide interoperable public safety broadband network. We also seek comment on whether there are other auction provisions we could establish that would promote the widest possible coverage of the nation's population by D Block licensees, while providing meaningful opportunities for regional bidders that would create interoperable regional networks. Further, we seek comment on whether the approach suggested by our tentative conclusions is consistent with the Commission's long-held policy of technology neutrality. To the extent commenters believe it is not, we ask that they provide specific input on modifications we could make that would advance technology neutrality. For example, would it be feasible to offer a fourth set of regional licenses that would allow the licensees to choose their own technology? What are the advantages and disadvantages of including such an additional set of regional licenses? Specifically, if licensees can choose their own technologies, how could we assure that regional deployments on licenses offered in the fourth regional set will be fully interoperable consistent with our fundamental premise that bridging, gateways, and/or IP patches are insufficient for this purpose? Finally, we seek comment on when the auction should commence.

253. While the *700 MHz Second Further Notice* did not seek comment on the details of auction design, some commenters noted their objections to the possibility of package bidding. United States Cellular opposes the use of package bidding in any auction to license the D Block subject to the Public Private Partnership.[478] The Rural Telecommunications Group also opposed package bidding.[479]

254. We tentatively conclude that the Wireless Telecommunications Bureau should consider specific procedures for package bidding with respect to regional licenses. As discussed elsewhere, we tentatively conclude that we should offer regional licenses in order to enhance the likelihood that an applicant will seek licenses covering as much population as possible. While regional licenses offer applicants greater flexibility than a nationwide license, and bidders can win multiple regional licenses, some potential applicants may prefer to be able to place single bids covering geographic areas that are significantly larger than the roughly state-sized PSRs. Accordingly, we tentatively conclude that we should direct the Wireless Telecommunications Bureau, as part of its pre-auction process, to seek comment on and establish specific procedures for package bidding for regional licenses that might

[478] US Cellular Comments at 21-22. Coleman Bazelon asserted with respect to Auction 73 that package bidding and anonymous bidding created difficulties for smaller bidders. *See* Bazelon Comments, Attachment at 11-14. Cox Communications opposes the use of anonymous bidding in any auction to license D Block that is not subject to the Public Private Partnership. Cox Communications Comments at 13-14. MetroPCS opposes the use of package bidding in any auction to license D Block that is not subject to the Public Private Partnership. MetroPCS Comments at 21-22.

[479] RTG Comments at 11.

encourage bidding on licenses that cover as much population as possible. With respect to the concerns raised by commenters, we note that consistent with the Commission's conclusion in the *Second Report and Order*, we anticipate that the Wireless Telecommunications Bureau can implement procedures for an auction with package bidding that will not impose disadvantages on parties that wish to bid on individual licenses offered and direct that it consider procedures that further that objective.[480]

255. Because of the critical importance of achieving a truly nationwide interoperable wireless broadband network for public safety, we propose to take prompt action to assign any licenses remaining unsold if an auction meets the minimum coverage requirement and yet there is no winning bidder in some regions. Any remaining unsold licenses after an auction satisfies the minimum coverage requirement will be regional licenses conditioned on the use of a particular broadband technology platform. Such licenses will be unsold if no party is willing to make the minimum opening bid for the license, notwithstanding the Commission's reduction of the minimum opening bid to $0.005 per megahertz per population (MHz-pop). Furthermore, regional licenses subject to the Public/Private Partnership will have been sold that cover at least fifty percent (50%) of the nation's population, consistent with the minimum coverage requirement. Thus, licenses sold will provide a foundation for an interoperable public safety wireless broadband network and yet the network will not be nationwide because some regional licenses remain unsold, despite very low minimum opening bids. In order to realize the benefits of a truly nationwide network, we propose that under such unique circumstances, we tentatively conclude that the Commission should depart from its standard approach of offering commercial licenses to the applicant making the highest bid without reference to the applicant's particular business plan and instead conduct a Request for Proposal (RFP) process, incorporating consideration of applicant's proposals together with their bids.[481]

256. One possible RFP process under such circumstances would be to request the submission of detailed proposals and bids from would-be licensees regarding how they would use the regional license to deploy an interoperable broadband network useable for public safety in the applicable region, in conjunction with the D block licenses already won at the auction. We would determine the contents of the request in consultation with the PSBL, the applicable regional public safety planning committee, and other parties, including public commenters, as may be appropriate. The RFP would specify the license being offered, the applicable Commission rules, any additional requirements or modifications appropriate to the region, and specify the process by which any proposal(s) and bids would be evaluated. Based on this process, we would award the license to the qualified party with the proposal and bid that best meet the requirements. The terms of the proposal would then be incorporated into an NSA for the region. We seek comment on this approach.

257. Alternatively, we could re-allocate the spectrum so that it can be assigned to the Public Safety Broadband Licensee. The PSBL would then request the submission of detailed proposals from would-be licensees regarding how they would deploy an interoperable broadband network useable for public safety in the applicable region in partnership with the D block licenses won at the auction. We seek comment on these options.

258. We seek comment as well on whether these approaches would be consistent with the Commission's obligations under Sections 309(j) and 337(a) with respect to the allocation of spectrum and the method of assigning D Block licenses. We believe that, at least once the Commission has put up for auction two times the entire D Block portion of the 36 megahertz of spectrum allocated for commercial use under Section 337 and assigned a substantial number of commercial licenses in this Block through competitive bidding to cover at least half of the country, at a time when the DTV transition has already

[480] *See Second Report and Order*, 22 FCC Rcd at 15397 ¶ 290.

[481] Because this approach does not involve any procurement by or on behalf of the federal government, the use of the term "RFP" would not imply any obligation on the part of the federal government to apply the Federal Acquisition Regulations, 48 C.F.R. Chapter 1, or any other government contracting requirements.

taken place and all the rest of the 36 megahertz of spectrum has been made available by auction and nearly all subsequently licensed, the Commission would have satisfied the allocation and assignment obligations of Section 337(a) for those D Block licenses that have failed to sell. In this regard, we note that the circumstances here differ significantly from those that informed our conclusion in the *Second Report and Order* that we lacked authority under Section 337 at that time to reallocate commercial use guard band spectrum to public safety.

b. Eligibility Restrictions

259. Comments. Some public safety and commercial commenters, including public safety entities, equipment manufacturers and large commercial wireless providers, oppose adopting eligibility restrictions on participation in an auction to license the D Block subject to the Public Private Partnership. PSST expressly refrains from taking a position on the issue. Other commenters, primarily smaller commercial entities as well as public interest commenter PISC, support such a proposal.

260. So long as the Public Private Partnership is retained, NATOA et al. do not support any restrictions on eligibility of otherwise qualified potential licensees to bid for the D Block license.[482] APCO contends that the Commission should not impose eligibility restrictions that are unrelated to the goal of developing a national public safety broadband network.[483]

261. The Consumer Electronics Association opposes any restriction on bidding eligibility that might preclude incumbents from bidding, given the incumbents' qualifications and experience.[484] Motorola opines that given the significant investment required to develop and deploy a public-safety grade broadband network, excluding current spectrum holders will put the entire effort in jeopardy.[485] Qualcomm contends that the lack of bidding on D Block in Auction 73 counsels against any restrictions on eligibility in a subsequent auction.[486]

262. Both AT&T and Verizon Wireless also oppose eligibility restrictions, noting that larger wireless providers are precisely the parties best positioned to create a new public safety network.[487]

263. PSST does not take a position on eligibility restrictions at this time.[488] However, PSST advocates that the Commission attempt to assure itself of the intentions of AT&T and Verizon Wireless, in order to avoid an outcome where the possibility that those entities might participate in the auction deters other participants, notwithstanding a lack of interest by either AT&T or Verizon Wireless.[489]

264. Claiming that AT&T, Sprint, T-Mobile, and Verizon Wireless currently have a collective "chokehold" on the wireless services industry and that there is a low likelihood that new entrants will have any opportunity other than the D Block, Council Tree Communications asserts that AT&T, Sprint, T-Mobile and Verizon Wireless should be prohibited from participating in an auction to license the D Block.[490] For the same reasons, Council Tree advocates use of the "attributable interest" standard

[482] NATOA *et al.* Comments at 21.

[483] APCO Comments at 38.

[484] CEA Comments at 5.

[485] Motorola Comments at 17.

[486] Qualcomm Comments at 11-12.

[487] AT&T Reply Comments at 12; Verizon Wireless Comments at 22.

[488] PSST Comments at 43. PSST did not amend this position in its Reply Comments. *See, generally,* PSST Reply Comments.

[489] PSST Comments at 44-45.

[490] Council Tree Communications Comments at 14.

previously used as part of the former spectrum aggregation limit to preclude participation by parties in which one of the barred carriers has an attributable interest.[491]

265. Cellular South "strongly encourages" the Commission to limit participation in the D Block auction by parties who have significant access to 700 MHz spectrum.[492] In particular, Cellular South endorses the use of the Commission's spectrum aggregation screen used for wireless transactions in connection with licensing of the D Block.[493] Similarly, Leap proposes that the Commission bar entities that won a "substantial amount of spectrum" in Auction 73 from participating in an auction to license the D Block.[494] More specifically, Leap proposes that any current license holder or winning bidder capable of reaching more than half of the nation's population with its 700 MHz spectrum be prohibited from participating in an auction to license D Block.[495] NTCH proposes that parties with more than 20 megahertz of 700 MHz spectrum in a given market, primarily AT&T and Verizon Wireless, should be precluded from bidding on the D Block in that market.[496]

266. Citing conditions for competition that it contends worsened as a result of the outcome of Auction 73, PISC advocates the adoption of a spectrum cap of 95 megahertz in a market, as well as the grant of its pending petition for reconsideration which would preclude the C Block licensee from holding the D Block license.[497] In the current proceeding, the Rural Telecommunications Group advocates a per county spectrum cap of 24 megahertz of 700 MHz band spectrum, while it seeks in a separate proceeding to impose a general spectrum cap on spectrum below 2.3 GHz.[498] These restrictions on eligibility to hold a license would go beyond the bidding eligibility restrictions contemplated by the Commission in the *700 MHz Second Further Notice.*

267. Discussion. We tentatively conclude that we should not adopt any restriction on the eligibility to bid for D Block licenses by any entity otherwise eligible to be a D Block licensee based on its spectrum holdings, whether in the 700 MHz band or any other band.[499] The *700 MHz Second Further Notice of Proposed Rulemaking* sought comment on whether a restriction on eligibility to bid in an auction to license the D Block might increase the likelihood that a new entrant to nationwide service in the 700 MHz band would have an opportunity to do so. We tentatively conclude that the public interest in maximizing the likelihood that a nationwide interoperable broadband network meeting the needs of public safety will be built outweighs any possibility that a restriction on eligibility to bid in an auction to license the D Block pursuant to the Public Private Partnership will increase the likelihood that a new nationwide service provider will emerge. We note that this tentative conclusion does not itself bar any new provider from participating in an auction to license the D Block. Moreover, to the extent incumbent providers have cost advantages over a new provider with respect to providing nationwide service that meets the needs of public safety, we tentatively conclude it better serves the public interest to enable those savings to be put to use in facilitating the provision of such service, rather than by requiring the D Block winner

[491] Council Tree Communications Comments at 16.

[492] Cellular South Comments at 2.

[493] Cellular South Comments at 3.

[494] Leap Comments at 4.

[495] Leap Comments at 7.

[496] NTCH Comments at 13.

[497] PISC Comments at 6-7.

[498] RTG Comments at 8-11.

[499] As we discuss elsewhere, we tentatively conclude that we should establish eligibility conditions for any advisor to the Public Safety Broadband Licensee.

to assume additional costs.

268. We decline to adopt PSST's suggestion that we seek a commitment from nationwide incumbent service providers regarding their intentions to participate in an auction to license D Block. We recognize the PSST's concern that uncertainty regarding potential competition from incumbents in an auction conceivably could inhibit other potential bidders, notwithstanding an ultimate lack of interest by incumbent nationwide service providers. However, we believe that parties dissuaded from even applying to participate in an auction by such concerns are unlikely to have the commitment or the resources essential to providing service as a D Block licensee. Moreover, we recognize that incumbent nationwide service providers may be unable to determine their ultimate intentions regarding their interest in the D Block with certainty far enough in advance of an auction for their statements to be of use to other applicants. We do not want to foreclose the possibility that an incumbent carrier might become a licensee by requiring them to make an earlier determination than other parties regarding their interest in doing so. Accordingly, we decline to adopt PSST's suggestion that we seek a commitment from nationwide incumbent service providers regarding their intentions to participate in an auction to license D Block.

269. The *Second Further Notice* did not seek comment on a spectrum cap or any limitation on the ability of parties to hold licenses for the D Block. As many commenters noted, in the *Second Report and Order*, the Commission considered and rejected restricting eligibility to hold licenses in the 700 MHz band based on competition in the market for broadband services.[500] While the spectrum holdings of parties have changed in the period since that decision, none of the commenters demonstrate that these changes have resulted in any change in the market for broadband services that mandates revisiting our decision. Thus, even if within the scope of this proceeding, we do not believe the record before us supports any spectrum cap applicable to the D Block at this time. Our conclusion in this regard is without prejudice to our review of the record in any other proceedings regarding potential spectrum caps.

c. Reserve Price

270. Comments. As to the level of any reserve price used in an auction to license the D Block, the consensus view among commenters is that the reserve should be reduced or even eliminated. Numerous commenters, from Council Tree Communications to Verizon Wireless to APCO, supported significantly reducing or eliminating a reserve price altogether. Some commenters, such as Jon Peha, Coleman Bazelon, and Northrop Grumman, even supported eliminating a minimum opening bid. MetroPCS was the only commenter that supported an aggressive reserve price in excess of the minimum opening bid.

271. NATOA et al. assert that, so long as the Public Private Partnership is retained, there is no need for a reserve price in light of the revenues recovered in Auction 73.[501]

272. Ericson asserts that the public interest would be served by a reserve price just high enough to assure that a winning bidder has an economic stake in successfully negotiating an NSA but not one linked to the potential value of the D Block absent the Public Private Partnership.[502] Northrop Grumman asserts that given the financial success of Auction 73 and the need to attract additional interest in the D Block, neither a minimum opening bid nor a reserve price would serve the public interest in an auction to license D Block.[503]

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[500] Parties have filed petitions for reconsideration of that decision, which remain pending before the Commission. *See, e.g.,* PISC Petition for Reconsideration at 2.

[501] NATOA et al. Comments at 20-21.

[502] Ericson Comments at 33.

[503] Northrop Grumman Comments at 9.

273. Individual commenters Jon Peha and Coleman Bazelon both contend that the D Block winner may need subsidies in order to construct the Public Safety Network and, accordingly, there should be no reserve price.[504]

274. We note that three academic commenters address the role of the reserve price rather than its level. Sandro Brusco, Giuseppe Lopomo, and Leslie M. Marx (Brusco et al.) address the reserve price from the perspective of using it in order to determine whether to impose additional requirements on the licensee. They contend that meeting a reserve price is likely to be a poor mechanism for balancing public and private interests and for identifying the highest valuing user of the spectrum.[505] As an alternative mechanism, Brusco et al. suggest that the Commission consider using an "exclusive buyer mechanism" in which bidders compete for the right to choose between the license with requirements or without requirements (or with fewer requirements), with a discount on a bidder's bid if it chooses to accept the requirements. In such a mechanism, the Commission would set the bid discount to reflect the public benefit of the requirements.[506] Given our tentative conclusion to retain the D Block license requirements regardless of the bidding in the next auction, this analysis is not relevant to our current decisions.

275. Discussion. We tentatively conclude that we should direct the Wireless Telecommunications Bureau to not adopt a reserve price greater than any minimum opening bid or bids. The successful creation of a nationwide interoperable broadband network meeting the needs of public safety will be of enormous value to the public, quite possibly exceeding the value of any potential revenue for the public from the sale of licenses for the D Block. Thus, in contrast to our decisions with respect to Blocks A, B, C, and E in Auction 73, we tentatively conclude that it is not in the public interest to adopt a reserve price beyond the minimum opening bid to assure that the adoption of the Public Private Partnership does not have an excessive negative effect on the value of the public spectrum resource. In addition, as many commenters note, the results of Auction 73 more than satisfied the revenue expectations of the Congress with respect to the auction of recovered analog spectrum, as set forth in the DTV Act. Furthermore, a reserve price may have negative consequences by discouraging otherwise viable bidders from competing in an auction. Accordingly, no reserve price beyond the minimum opening bid for the next auction to license the D Block is needed to serve a larger policy goal, notwithstanding our contrary decision in Auction 73. At the same time, we also tentatively conclude that it is in the public interest to direct the Wireless Telecommunications Bureau to establish initial minimum opening bids for each set of alternative D Block licenses that equal or aggregate approximately $750 million.[507] We seek comment on our tentative conclusions, including whether the proposed aggregate minimum opening bids should be lowered.

d. Impermissible Material Relationships for Designated Entities

276. Comments. Only a select group of commenters addressed this issue. Council Tree Communications, MetroPCS, NATOA et al., and Wirefree Partners all addressed this issue.

277. NATOA et al. favor codifying the waiver, so long as the Public Private Partnership is retained, so as to facilitate the participation of smaller bidders.[508] Council Tree Communications favors codifying the waiver.[509] In addition, Council Tree Communications proposes that the Commission waive

[504] Bazelon Comments at 2.

[505] Brusco et al. Comments at 2-4.

[506] Brusco et al. Comments at 5.

[507] Appendix F provides proposed minimum opening bids for each of the 58 PSRs, which total approximately $750 million.

[508] NATOA et al. Comments at 21.

[509] Council Tree Communications Comments at 11.

all designated entity rule modifications adopted since 2006, in part due to Council Tree Communications pending litigation challenging those rule changes.[510] Wirefree likewise supports codifying the waiver in connection with making other changes to the designated entity rules.[511] Wirefree would liberalize the designated entity rules by returning to a pre-2000 structure of requiring that qualifying entities maintain a minimum equity interest in the applicant while not attributing revenues of other interest holders to the applicant.[512]

278. MetroPCS opposes codifying or even retaining the waiver. MetroPCS argues generally that the Commission should not retain the Public Private Partnership that is the basis of the current waiver.[513] Consistent with its view that the Public Private Partnership will make extreme demands on the D Block licensee's financial resources, MetroPCS argues that that the Commission should not offer bidding credits to applicants for D Block license(s).[514] Further, MetroPCS contends that a D Block exemption from the impermissible material relationship rule is not supported by any "unique or unusual circumstances surrounding this spectrum."[515]

279. Discussion. We tentatively conclude that we should codify the substance of the previously granted waiver of the impermissible material relationship rule so that a D Block applicant or licensee with lease or resale (including wholesale) arrangements with other entities involving more than 50 percent of the spectrum capacity of a D Block license will not be ineligible for designated entity benefits solely on the basis of such arrangements.[516] The waiver of the rule was premised on the fact that certain aspects of the Commission's D Block rules with respect to the Public Private Partnership provided adequate safeguards against the abuses the impermissible material relationship rule was intended to prevent. We do not believe that any of the changes in the D Block rules we tentatively propose today invalidate that premise. Accordingly, we disagree with MetroPCS's contention that there are no unique or unusual circumstances surrounding this spectrum and tentatively conclude that we should codify the waiver.[517] We seek comment on this tentative conclusion.

280. We further tentatively conclude that we should not revisit more generally the rules regarding designated entity eligibility as proposed by Council Tree Communications or Wirefree. Without prejudging those proposals, it is more appropriate to address the rules regarding designated entity eligibility generally in a separate proceeding. The Commission can consider its general designated entity eligibility rules in various pending proceedings, including a pending Further Notice of Proposed Rulemaking and pending petitions for reconsideration arising from the Commission's most recent

[510] Council Tree Communications Comments at 13.

[511] Wirefree Comments at 9-10.

[512] Wirefree Comments at 9-11.

[513] MetroPCS Comments, passim.

[514] MetroPCS Comments at 34-35.

[515] MetroPCS Comments at 36.

[516] If a D Block applicant or licensee utilizes this exception to the impermissible material relationship rule, it still remains subject to our other designated entity eligibility rules, including our controlling interest, unjust enrichment, attributable material relationship, audit, eligibility event and annual reporting rules. *C.f.*, In Re Waiver of Section 1.2110(b)(3)(iv)(A) of the Commission's Rules For the Upper 700 MHz Band D Block License, Order, 22 FCC Rcd. 20354, 20357 ¶8, fn. 21 (2007).

[517] Because this exception does not extend to arrangements for use of the spectrum capacity of licenses *other than* the D Block license, if an applicant or licensee has an impermissible material relationship with respect to the spectrum capacity of any other license(s), the normal operation of the Commission's rules will continue to render it ineligible for designated entity benefits for the D Block license.

revisions to the designated entity program. We also reject the notion that Council Tree Communications' attempt to litigate the Commission's existing designated entity rules, which the Commission adopted to further the public interest and applied in the recent auctions of Advanced Wireless Services and 700 MHz licenses, is any basis for suspending those rules in the next auction to license the D Block spectrum.

e. Default Payment Amounts

281. Comments. Few commenters addressed whether to modify the default payment outside of the context of a failed attempt to negotiate an NSA. Andrew Seybold states without further discussion that "the penalty clause should be removed."[518] Qualcomm asserts that the default rules are among rules that must be revised but suggests only that the Commission wait until the close of the comment cycle in response to the 700 MHz 2d FNPRM and then convene all affected stakeholders in a meeting or meetings to ensure that the revised rules strike the right balance.[519]

282. Discussion. We tentatively conclude that the Commission's existing rules governing the amount of the default payment are generally appropriate for circumstances in which a D Block winning bidder may be liable for a default payment.[520] However, we also tentatively conclude that for an auction of alternative D Block licenses, the Commission should apply the same default payment amount rule regardless of whether or not it package bidding is utilized. Currently, our rules provide that the Bureau, prior to auctions without combinatorial bidding, *i.e.,* package bidding, shall establish the percentage for the additional payment component of a default payment between 3 and 20 percent. In auctions with combinatorial or package bidding, the Commission's rules provide that this percentage shall be 25 percent. The Commission established this higher percentage for package bidding auctions because of the potential inter-relatedness of bids in such an auction. Because each bidder's bid in a package bidding auction is combined with bids on other licenses to determine the group of winning bids, any one bid may affect which bids win other licenses. Consequently, the Commission concluded that it is particularly important to discourage defaults in package bidding auctions. As we have discussed elsewhere, bids in an auction of alternative licenses are also inter-related, regardless of whether package bidding is available. However, we tentatively conclude that in an auction of alternative licenses for the D Block subject to the 700 MHz Public/Private Partnership, whether or not package bidding procedures are implemented, we should direct the Wireless Telecommunications Bureau to set the percentage of the additional payment for defaults at between 3 and 20 percent, the same range for an auction without package bidding. We tentatively conclude that this range will enable the Bureau to set an appropriate percentage as part of its pre-auction process, taking into account both the special circumstances of the D Block and the final details of the auction process to be used. We seek comment on this tentative conclusion.

f. Other Competitive Bidding Rules

283. Background. In the *Second Further Notice*, we sought comment on other potential changes to our competitive bidding rules, potentially to assist new entrants or to serve other public interest purposes.

284. Comments. Sprint proposes a system of performance-based bidding credits, in which applicants agreeing to meet any of up to 5 potential stricter performance requirements could receive bidding credits, subject to a requirement to repay the credit, with interest, if the applicant does not meet the stricter standards. AT&T opposes this proposal, characterizing it as "[a]llowing carriers to eviscerate

[518] Andrew Seybold Comments at 7.

[519] Qualcomm Comments at 11.

[520] As discussed elsewhere, we have concluded tentatively that our default payment rules should be modified with respect to the circumstances under which they apply to D Block winning bidders following a failure to negotiate an NSA with the PSBL that is acceptable to the Commission.

[minimum] standards by paying additional money."[521] Commenter Andrew Seybold proposes that an auction be conducted to determine the party that will manage the Public Safety Network, with incumbent carriers constructing the network in response to other incentives, such as tax credits and access to the network.[522] In this context, he advocates that the Commission lift its anti-collusion rule, in order to enable communications among incumbent carriers and prospective network managers.[523] As part of its own alternative proposal, NTCH suggests that the Commission lift the anti-collusion rule prior to the auction, apparently unaware that the rule does not apply until would-be licensees file applications to participate in the auction.[524] NATOA also suggests "relaxing" the Commission's anti-collusion rules, apparently under the mistaken belief that the rules prohibit the creation of bidding consortia prior to the auction.[525] United States Cellular opposes the use of anonymous bidding in any auction to license the D Block subject to the Public Private Partnership.[526] As noted above, Council Tree Communications and Wirefree Partners suggest several changes to the Commission's designated entity program in order to encourage participation by designated entities.

285. Discussion. We seek further comment with respect to the approach advocated by Sprint. As discussed elsewhere in this Third Further Notice, we have reached tentative conclusions with respect to the appropriate level of performance mandates. We ask that commenters address whether we should modify these performance mandates by offering bidding credits to applicants willing to commit themselves to meeting greater requirements. In light of the mandates proposed herein, with respect to which mandates should the Commission offer bidding credits for commitments to exceed the requirements? What would be the level by which the mandate should be exceed before a credit should be offered? What amount of credit is appropriate for a particular performance requirement? Should the credit only be refunded from the full bid price after the greater requirement is met? Or should the commitment be sufficient to receive a reduction in the bid amount, subject to repayment if the commitment is not fulfilled? Does the appropriate approach change depending on the particular performance requirement?

286. We tentatively conclude that we should not make any of the changes commenters propose to the Commission's competitive bidding rules. As our anti-collusion rule applies solely after parties file applications to participate in bidding for Commission licenses, we tentatively conclude bidding consortia may form prior to the application deadline without any relaxation of the rule. Furthermore, in light of our tentative conclusion that the winning bidder for a D Block license should negotiate an NSA only after the conclusion of the auction, there is no reason to relax the anti-collusion rule to permit communications during the auction in connection with the terms of the NSA. Commenters' proposals regarding certain details of auction design, such as anonymous bidding, are best addressed in

[521] AT&T Reply Comments at 21.

[522] Andrew Seybold Comments at 4.

[523] Andrew Seybold Comments at 5.

[524] NTCH Comments at 14.

[525] NATOA *et al.* Comments at 21.

[526] US Cellular Comments at 21-22. Coleman Bazelon asserted with respect to Auction 73 that package bidding and anonymous bidding created difficulties for smaller bidders. *See* Bazelon Comments, attachment at 11-14. Cox Communications opposes the use of anonymous bidding in any auction to license D Block that is not subject to the Public Private Partnership. Cox Communications Comments at 13-14. MetroPCS opposes the use of package bidding in any auction to license D Block that is not subject to the Public Private Partnership. MetroPCS Comments at 21-22.

the context of the Wireless Telecommunication Bureau's pre-auction notice and comment process.[527] Finally, for reasons discussed above, we will not consider in this proceeding the wholesale changes to our designated entity eligibility rules proposed by Council Tree Communications and Wirefree Partners.

8. Safeguards for Protection of Public Safety Service

287. Background. In the *Second Report and Order*, we established a number of measures to safeguard the interests of public safety on an ongoing basis following the execution of the NSA. These measures included: (1) requirements related to the organization and structure of the 700 MHz Public/Private Partnership; (2) a prohibition on discontinuance of service provided to public safety entities; (3) special remedies in the event that the D Block licensee or Public Safety Broadband Licensee fail to comply with either the Commission's rules or the terms of the NSA; (4) a special, exclusive process for resolving any disputes related to the execution of the terms of the NSA; and (5) ongoing reporting obligations.[528] These measures addressed concerns that problems arising after the execution of the NSA, whether financial or otherwise, might threaten the build-out of the network or the provision of services to public safety, or that financial problems might lead the D Block licensee to draw its license or the network assets into a bankruptcy proceeding. We did not specifically propose any modifications to these rules in the *Second Further Notice*.

288. Discussion. We tentatively conclude that we should retain these rules to safeguard the interests of public safety on an ongoing basis following the execution of the NSA. We continue to believe that the measures we previously adopted are necessary to address the possibility that problems could arise in the implementation of the NSA or the operation of the common network, and that they will protect the interests of public safety without compromising the commercial viability of the 700 MHz Public/Private Partnership.[529]

289. We also note that, in addition to the quarterly reporting requirements adopted in the *Second Report and Order*, we have proposed elsewhere in this Third Further Notice that the D Block licensee be required to provide to the Public Safety Broadband Licensee monthly network usage statistics. We find that these existing and newly proposed reporting requirements address the concerns of some commenters regarding the need for oversight of the D Block licensee's operations. We seek comment on these tentative conclusions.

290. In addition, we seek comment on whether a winning bidder for any D Block license should post financial security to ensure that the network will be constructed pursuant to the terms of the NSA and the Commission's rules. In particular, we seek comment on whether a winning bidder for D Block licenses should be required to obtain an irrevocable standby letter of credit ("LOC") no later than the date on which its executed NSA is submitted to the Commission. We also seek comment on whether only applicants that do not meet certain criteria should be subject to this requirement. For example, should we establish criteria, based on bond rating, market capitalization, or debt/equity ratios (combined with minimum levels of available capital) that, if not met, would make an LOC necessary?

291. We seek comment on the amount of the LOC necessary to ensure uninterrupted

[527] The Commission detailed the public interest reasons underlying its decision to utilize anonymous bidding in for the auction of 700 MHz Band licenses in the *Second Report and Order* and has used anonymous bidding in a number of Commission auctions for wireless services licenses. Accordingly, absent good cause, we expect that anonymous bidding likely will be employed in the next auction of the D Block.

[528] *Second Report and Order*, 22 FCC Rcd at 15467-71 ¶¶ 517-530.

[529] *But see* Letter from Warren G. Lavey, US Cellular, to Marlene H. Dortch, Secretary, FCC, WT Docket 06-150, PS Docket 06-229, filed Sept. 17, 2008 (asserting that the requirement to form bankruptcy remote special entities "may be detrimental to the rapid, efficient deployment and operation of networks by many potential D Block licensees").

construction of the public safety network, as well as the length of time that the LOC should remain in place. For example, the amount of the LOC could be determined on the basis of estimated annual budgets that could accompany the build-out schedule required as part of the NSA, or we could simply require a specific dollar figure for the LOC in an amount that would ensure that construction could proceed for a given amount of time. Should the amount of an initial LOC, or a subsequent LOC, also ensure the continuing maintenance and operation of the network? Under what circumstances should the D Block licensee be required to replenish the LOC?

292. We also seek comment on whether the LOC should be issued in favor of a trustee and the Commission. What events would constitute a default by the D Block licensee that would allow the trustee or the Commission to make a draw on the entire remaining amount of the LOC? Further, we note our intent that, in the event of bankruptcy, the LOC should be insulated from claims other than the draws authorized here for the construction and operation of the network. We seek comment on provisions we might adopt to provide safeguards to this effect.[530]

293. As an alternative to an LOC, we seek comment on whether we should require parties to obtain performance bonds covering the cost of network construction or operation. We also seek comment on the types of requirements that bond issuers might impose and whether such requirements are consistent with the public interest in permitting a range of qualified parties to seek D Block licenses. We also seek comment on the relative merits of performance bonds and LOCs and the extent to which performance bonds, in the event of the D Block Licensee's bankruptcy, might frustrate our goal of ensuring timely buildout of the network. We also seek comment on whether there are other protections that the Commission should reasonably seek to ascertain the financial viability of the winning bidder, and ensure construction of the network and its subsequent operation.

9. Local Build-Out Options

294. Background. In the *Second Report and Order*, we adopted provisions for early build-out in areas that do and do not have a build-out commitment from the D Block licensee. Under these provisions, for areas with a build-out commitment, public safety entities can, with pre-approval from the Public Safety Broadband Licensee, construct at its own expense a broadband network in that area that conforms to the requirements and specifications of the NSA, and must transfer such network to the D Block licensee for integration into the Shared Wireless Broadband Network. In this case, the public safety entity's compensation would be limited to the costs the D Block licensee would have incurred had it constructed the network in that area itself. Alternatively, rather than constructing the network at its own cost, the public safety entity could provide the D Block licensee with the funds necessary to do so.[531] For areas lacking a build-out commitment from the D Block licensee, public safety entities may, at their own expense, construct and operate an exclusive broadband network that is fully interoperable with the Shared Wireless Broadband Network, pursuant to a spectrum leasing arrangement with the Public Safety Broadband Licensee, and after the Public Safety Broadband Licensee first offers the D Block licensee the option of constructing a network in that area itself.[532]

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[530] For example, we could require as a condition of the Public/Private Partnership License that any winning bidder for a D Block license and related parties must first provide the Commission with a legal opinion letter that would state, subject only to customary assumptions, limitations and qualifications, that in a proceeding under Title 11 of the United States Code, 11 U.S.C. Section 101 et seq. (the "Bankruptcy Code"), in which the winning bidder is the debtor, the bankruptcy court would not treat the Letter of Credit or proceeds of the Letter of Credit as property of the winning bidder's bankruptcy estate (or the bankruptcy estate of any other bidder-related entity requesting the issuance of the LOC) under Section 541 of the Bankruptcy Code.

[531] *See* 47 C.F.R. § 90.1430(b)(1)-(4).

[532] *See* 47 C.F.R. § 90.1430(b)(5).

295. Comments. The *Second Further Notice* did not specifically seek comment on changes to the rules on local public safety build-out. However, some commenters advocated for greater flexibility or autonomy in building out their own networks in the 700 MHz public safety broadband spectrum.[533] APCO cautions that "while some accommodation for certain local deployments in the context of a national license is necessary, the Commission must avoid creating yet another situation consisting of multiple islands of robust, but incompatible, public safety networks with vast unserved areas in-between."[534] Similarly, California asserts that "[t]he vision of a nationwide Shared Wireless Broadband Network (SWBN) cannot be realized through the deployment of a multitude of [discrete] systems," arguing that, given limited economic resources, "[s]ome public safety agencies in urban areas would likely implement broadband networks, but those in rural areas would find it harder to justify building a local or regional broadband network."[535] APCO adds that it continues to support allowing local deployments in areas where the national network is unlikely to be built in the near future, conditioned on eventual integration into the national network.[536]

296. In an *ex parte* letter, Alcatel-Lucent proposes changes to the local build-out rules that would create an additional option allowing a public safety entity to "enter a spectrum lease agreement with the Public Safety Broadband Licensee and, at its own expense, build out a 700 MHz broadband network in any area where the public-private broadband system has not yet been built."[537] Further, if the D Block licensee "were to seek to build out and operate the public-private network in the same area, it would be required to compensate the public safety entity, based upon commercially reasonable terms, for the value of the network to be integrated into the public-private network."[538] Alcatel-Lucent also argues that "[n]etwork integration and technological evolution are commonplace in commercial mobile networks today, and there is no technological impediment to integration – regardless of technologies."[539]

297. Discussion. The local build-out rules we adopted in the *Second Report and Order* afford public safety entities with options to build out broadband networks in advance or in lieu of the D Block licensee's build-out, so that public safety agencies may obtain use of advanced broadband networks more quickly if their needs so dictate. Particularly in areas that have a build-out commitment, a public safety entity serving that area may already have invested resources in development of plans to deploy a system that is tailored to that area and thus may have options available to accelerate the deployment of the public safety broadband network to its jurisdiction. At the same time, we recognize that since the auction of the D Block did not result in a winning bid, there has been an associated delay in the deployment of the nationwide broadband network, which may impact the extent to which some public safety agencies may desire to construct their own networks before a new auction is completed.

298. In its comments, the District of Columbia (the "District") made certain requests related to the Regional Wireless Broadband Network (RWBN)[540] operated by the National Capital Region (NCR)

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[533] *See* Kentucky Wireless Interoperability Executive Committee Comments at 1, San Francisco Comments at 3-4; Philadelphia Comments at 5-8, NYPD Comments at 7-10, District of Columbia Comments at 8-15.

[534] APCO Reply Comments at 3.

[535] California Comments at 7.

[536] *See* APCO Reply Comments at 3 n.2.

[537] Alcatel-Lucent Ex Parte at 2.

[538] *Id*.

[539] *Id*.

[540] NCR deployed the RWBN in the 700 MHz Band pursuant to a waiver issued by the PSHSB in January 2007. *See* Request by National Capital Region for Waiver of the Commission's Rules to Allow Establishment of a 700 MHz Interoperable Broadband Data Network, WT Docket No. 96-86, *Order*, 22 FCC Rcd 1846 (PSHSB (continued….)

jurisdictions, of which the District is a member.[541] The District indicates that $8.2 million in Federal grant funds have been expended to build out the RWBN thus far, primarily within the District.[542] The District further states that it requires certainty to realize a return on further investment in the program.[543] Specifically, the District requests that we authorize it to: (i) continue deploying and operating the RWBN for 10 years from the date of any final decision on its request, or require the interoperable shared broadband network into which the RWBN would be incorporated to provide service to District users for 10 years free of charge; (ii) use the 700 MHz broadband spectrum for 10 years from the date of a final decision or until the RWBN is incorporated into the interoperable shared broadband network; (iii) use the RWBN to provide service to as broad a range of users as possible, including municipal, state, and Federal users, as well as other users not typically defined as "first responders;" and (iv) offer service and assign priority levels to specific groups of users as the District deems appropriate and necessary to sustain the RWBN financially.[544]

299. We tentatively decline to grant the District's request. We find that granting independent operational authority for a significant number of years to the District as it requests would undermine the goals of this proceeding and be inconsistent with the tentative proposals we have outlined in this Third Further Notice. Further, if, as the District requests, we require the D Block licensee to provide free service to the District, we are concerned about the resulting impact on the commercial viability of a regional or nationwide D Block licensee. Moreover, as we tentatively concluded elsewhere, the District would not be permitted to provide service to a wider range of users than would be eligible to use the nationwide wireless broadband network. While we appreciate the District's desire to realize a financial return on the investment made in deploying the RWBN, we observe that the NCR on multiple occasions knowingly undertook such action entirely at its own risk.[545]

300. While we tentatively decline to grant the District's specific requests outlined above, we remain sensitive to the fact that the District has expended significant efforts to achieve broadband interoperability in the near-term for public safety users within the District through the RWBN. Therefore, consistent with the *Second Report and Order*, we continue to contemplate that the Public Safety

(Continued from previous page)
2007)(*NCR Waiver Order*). NCR operates the RWBN pursuant to a grant of a request for Special Temporary Authority. *See* Special Temporary Authorization, File No. 0003149202, Call Sign WQHY489 (Nov. 1, 2007); Special Temporary Authorization, File No. 0003397425, Call Sign WQHY489 (April 28, 2008); Special Temporary Authorization, File No. 0003151108, Call Sign WQHY490 (Nov. 1, 2007); Special Temporary Authorization, File No. 0003397644, Call Sign WQHY490 (April 28, 2008).

[541] The NCR consists of eighteen jurisdictions: The District of Columbia, Montgomery and Prince Georges Counties of Maryland, and the cities of Gaithersburg, Rockville, Takoma Park, Bowie, College Park, and Greenbelt; Arlington, Fairfax, Loudon and Prince William Counties of Virginia, and the cities of Alexandria, Falls Church, Town of Leesburg, Manassas, and Manassas Park. *See* The National Capital Planning Act of 1952, 40 U.S.C. § 71.

[542] District Comments at 14.

[543] District Comments at 13.

[544] District Comments at 3.

[545] As we observed in the *Second Report and Order*, in requesting its waiver to operate its broadband network, NCR specifically represented that it "fully underst[ood] and accept[ed] that as a result of any rulemaking changes the Commission may make, the NCR will have to comply with the results of such rule making," including possible change of its network technology to a different standard or transition to a public safety broadband network managed by a single national licensee. *Second Report and Order* at ¶ 477 (citing *NCR Waiver Order* at 1849 ¶ 8, quoting letter from Bill Butler, NCR Interoperability Program, OCTO-Wireless Programs Group, to Marlene H. Dortch, Secretary, FCC (Jan. 29, 2007) and attached e-mail from Robert L. LeGrande, II, NCR Interoperability Program, Deputy Chief Technology Officer, District of Columbia, to Dana Shaffer, Deputy Chief, Public Safety and Homeland Security Bureau, FCC (Jan. 28, 2007)).

Broadband Licensee will consult NCR in negotiating the schedule for buildout of the shared interoperable network in the area served by the RWBN, and will provide NCR a reasonable amount of time to make any modifications necessary to incorporate the RWBN into the shared network.[546] In this manner, we hope to minimize any delays that the District might otherwise experience in realizing the benefits of an interoperable broadband network geared towards public safety needs. In addition, to the extent that the D Block licensee building out the NCR areas seeks to utilize any hard assets of the RWBN, such as tower facilities, in constructing the 700 MHz interoperable shared broadband network, NCR may seek appropriate compensation for the use of such assets.

301. As noted above, Alcatel-Lucent advocates changes to our local build-out rules to permit local public safety to build-out immediately, and thus prior to completion of a reauction of the D Block and selection of the air interface that would support nationwide interoperability. Alcatel-Lucent argues that, regardless of the technology deployed, the local network could be readily integrated into the regional or nationwide D Block license, and proposes that the D Block licensee would be required to "compensate the local public safety entity based upon commercially reasonable standards."[547]

302. While early deployment of public safety broadband networks would afford public safety agencies with the benefits of such networks more quickly, the Alcatel-Lucent proposal also poses a number of concerns. For example, unlike our current rules, which only contemplate the early build-out of systems utilizing the same technology as the D Block licensee, a public safety entity that engages in early deployment risks choosing a technology that is not compatible with the technology that will be deployed later by the D Block licensee. Although Alcatel-Lucent argues that any technology deployed by a public safety entity could be integrated into the regional or nationwide broadband network, we have tentatively concluded that the nationwide interoperable network should have the same air interface technology. Accordingly, we seek comment on how we can ensure that a public safety entity engaging in such early build-out selects a compatible technology that is fully interoperable with the Shared Wireless Broadband Network(s), meaning consistent with our tentative conclusions elsewhere concerning interoperability requirements for all operations in the 700 MHz public safety broadband spectrum, and thus not via gateways and bridges.

303. We also seek comment on Alcatel-Lucent's proposal that a D Block licensee seeking to operate in the area be required to compensate early public safety builders based upon "commercially reasonable standards." Should we replace our current rule, which limits compensation for early build to the costs that the D Block licensee would have incurred, with one based on "commercially reasonable standards?" How would "commercially reasonable terms" be determined? What if the network constructed by the local public safety agency was of little worth to the D Block licensee, whether due to technology choices, network design, or a D Block licensee's existing resources in the area? Would reliance on such a basis for compensation lead to significant or intractable disputes either at the Commission or in courts?

304. Given the potential costs and benefits in allowing early deployment of wireless public safety broadband networks, we seek comment on the appropriate balance between ensuring flexibility for public safety entities to engage in early deployment and providing some mechanism for compensation, if not under our existing rules, while also ensuring our goal of achieving nationwide interoperability across networks and maintaining the financial viability of the 700 MHz Public/Private Partnership. To what extent should public safety entities be allowed to deploy in advance of future build out by the D Block licensee? Are our existing rules on compensation for early build-out sufficient, or should some allowance be made for compensation for early build-out of systems using technologies that are different and

[546] *See Second Report and Order* at ¶ 478.

[547] Alcatel-Lucent Ex Parte at App. p. 2.

incompatible with those to be deployed by the D Block licensee for that area? Would allowing compensation for early deployment of incompatible technologies stand as a disincentive to auction participation by commercial entities?

10. Open Platform/Wholesale Conditions

305. Background. In the *Second Report and Order* we declined to restrict the D Block licensee to operating exclusively on a "wholesale" or "open-access" basis.[548] We concluded that it would not serve the goals of the Public/Private Partnership to impose special wholesale or open-access requirements on the D Block licensee.[549] Instead, we provided the D Block licensee with the flexibility to provide wholesale or retail services or other types of access to its network that comply with our rules and the NSA.[550] We reasoned that the D Block licensee has the flexibility to choose the commercial service it will provide based on its determination of market needs; and that this flexibility improves the viability of the 700 MHz Public/Private Partnership and serves the interests of public safety.[551] With respect to services offered to public safety, we noted that the Public Safety Broadband Licensee will have the right to determine and approve specifications for public safety equipment used on the network and the right to purchase its own subscriber equipment from any vendor it chooses, to the extent such specifications and equipment were consistent with reasonable network control requirements established in the NSA.[552]

306. In the *Second Further Notice*, we sought comment on whether we should require the D Block licensee to operate on an exclusively wholesale or open access basis.[553] We asked for comment on how an open access environment might affect public safety, and whether we need to clarify or revise the operational responsibilities of the D Block and the Public Safety Broadband Licensees if we were to adopt a wholesale approach.[554] Further, we sought comment on whether maintaining a flexible approach would improve the viability of the Public/Private Partnership.[555]

307. Comments. In response to the *Second Further Notice*, we received some comments on this subject matter. Motorola recommends that the Commission impose an open platform condition and allow public safety to use any device or application provided it does not harm the network.[556] Wireless RERC recommends consideration of an open access network contending that such a condition would allow public safety entities access to numerous suppliers of IP-based communications equipment and systems capable of interconnecting with the network.[557] It believes that this would allow the communication of emergency information to be accessible in many formats.[558] Cellular South argues that the Commission should impose a mandatory wholesale condition as a way to give smaller carriers entry

[548] *Second Report and Order* at ¶ 545.

[549] *Id*.

[550] *Id*.

[551] *Id.*

[552] *Second Report and Order* at ¶¶ 405-406, 546.

[553] *Second Further Notice* at ¶ 187.

[554] *Id*.

[555] *Id*.

[556] Motorola Comments at 11.

[557] Wireless RERC Comments at 14.

[558] Wireless RERC Comments at 15.

into the market.[559] PISC states that the Commission should impose both open access and wholesale conditions as they will help enhance competition and further public interest goals. [560]

308. Qualcomm argues that the Commission should not impose an open platform condition or forbid any particular business models.[561] AT&T argues that the Commission should not impose an open access platform or a mandatory wholesale condition because it violates the flexible use approach which has proven to produce the best technological and business practices.[562] It further asserts that a public/private partnership will fail if it is constrained by conditions not compatible to the reality of the market.[563] Google recommends that the Commission not impose open access or wholesale conditions for the present time, and states they should keep a careful watch on anti-consumer practices and intervene with such measures when appropriate. [564] Coleman Bazelon argues against imposing a wholesale condition because the spectrum will be most valuable to the larger carriers.[565] Ericsson argues against imposing a wholesale condition because such limitations on the business plan of the D Block licensee would make bidding less attractive to many potential bidders.[566] CTIA recommends that the Commission base its rules on the same market oriented, flexible-use service rule model that has successfully created today's wireless marketplace.[567] Verizon notes that the Commission should reject calls to impose wholesale-only and open access requirements.[568] Motorola supports "open access for public safety subscriber equipment and applications from multiple sources that meet public safety requirements."[569]

309. Discussion. In the *Second Report and Order*, we declined to impose broad open access or wholesale service requirements in the 700 MHz band because we found that it would not serve the goals of the Public/Private Partnership to mandate these requirements on the D Block licensee specifically.[570] Rather, we decided that the D Block licensee should be given the flexibility to choose the commercial service it would provide.[571] In our determination, we noted that the effects of an open access environment were unknown, and, before it was mandated, it was necessary to understand the impact that mandatory provisions would have on the public safety environment.[572] In this Third Further Notice, we tentatively conclude not to impose a mandatory wholesale or open access condition on the D Block licensee. Comments in support of mandatory wholesale and open access provisions have not established the impact that these provisions would have on the public safety environment and the goals of the

[559] Cellular South Comments at 3-4.

[560] PISC Comments at 7-10.

[561] Qualcomm Comments at 11.

[562] AT&T Comments at 18; AT&T Reply Comments at 10-14.

[563] AT&T Comments at 18.

[564] Google Comments at 10; Google Reply Comments at 1-4.

[565] Coleman Bazelon Comments at 22.

[566] Ericsson Comments at 35.

[567] CTIA Reply Comments at 8-9.

[568] Verizon Wireless Reply Comments at 19 n.43.

[569] Motorola Comments at 7.

[570] *Second Report and Order*, 22 FCC Rcd at 15476-77, 15478 ¶¶ 545, 549.

[571] *Id*., 22 FCC Rcd at 15476-77 ¶ 545.

[572] *Id*. (citing NPSTC *700 MHZ Further Notice* Reply Comments at 8-9).

Public/Private Partnership. We reaffirm that the D Block licensee has the flexibility to provide wholesale or retail services or other types of access to its network to comply with our rules and the NSA.[573] We believe that this flexibility improves the viability of the Public/Private Partnership, serves the interests of public safety, and is supported by the record.

310. With respect to subscriber equipment and applications offered to public safety, we propose to retain the flexibility afforded to public safety subscribers in the *Second Report and Order*. Specifically, we propose to retain the rights of the Public Safety Broadband Licensee to determine the public safety equipment and applications that would be used on the network. We also propose to retain the rights of public safety entities to purchase their own subscriber equipment and applications from any vendor they choose, provided that the equipment and applications they purchase are consistent with reasonable network management requirements and approved by the Public Safety Broadband Licensee. We seek comment on these proposals.

11. Other Rules and Conditions

311. In the *Second Further Notice*, we sought comment generally on whether, aside from the subjects specifically that we specifically discussed, we should modify any other aspects of the rules or conditions for the 700 MHz Public/Private Partnership. We tentatively conclude that, aside from the specific changes we have proposed in this *Third Further Notice*,[574] we should retain the existing rules governing the 700 MHz Public/Private Partnership largely without modification.

C. Public Safety Issues

1. Eligible Users of the Public Safety Broadband Spectrum.

312. Background. Section 337(a)(1) of the Communications Act requires the Commission to allocate 24 megahertz of spectrum between 746 MHz and 806 MHz for "public safety services."[575] Section 337(f)(1) of the Act defines "public safety services" as follows:

> (f) Definitions – For purposes of this section:
>
> (1) Public Safety Services – The term "public safety services" means services –
>
> (A) the sole or principal purpose of which is to protect the safety of life, health, or property;
>
> (B) that are provided -
>
> (i) by State or local government entities; or
>
> (ii) by nongovernmental organizations that are authorized by a governmental entity whose primary mission is the provision of such services; and
>
> (C) that are not made commercially available to the public by the provider.[576]

In establishing license eligibility rules for the 700 MHz public safety band in Section 90.523 of our rules

[573] Applicable rules include, but are not limited, provisions regarding leasing in Subparts Q and X of Part 1 of the Commission's rules.

[574] The specific rule changes we propose are included as Appendix G.

[575] 47 U.S.C. § 337(a)(1).

[576] 47 U.S.C. § 337(f).

we sought to mirror these eligibility requirements.[577]

313. Section 90.523(e) includes specific eligibility provisions applicable to the Public Safety Broadband Licensee.[578] Like the narrowband license eligibility provisions set forth in Sections 90.523(a)-(d),[579] we intended the provisions of Section 90.523(e) to ensure that the use of the 700 MHz public safety broadband spectrum, under the auspices of the Public Safety Broadband Licensee, be consistent with the statutory definition of "public safety services" in Section 337(f)(1)—both to ensure that the band remained allocated to such services, as required by Section 337(a)(1)—as well as to focus the Public Safety Broadband Licensee exclusively upon the needs of public safety entities that stand to benefit from the interoperable broadband network.[580]

314. In the *Second Further Notice*, we identified certain aspects of Section 90.523 that may need clarification. First, we identified two elements of the statutory definition of "public safety services" that the eligibility rules that could be construed as not applying explicitly enough to the Public Safety Broadband Licensee: (1) the Section 337(f)(1)(A) element that requires that the "sole or principal purpose … is to protect the safety of life, health, or property;" and (2) the Section 337(f)(1)(C) element that bars such services from being "made commercially available to the public by the provider."[581] Second, we observed that there may be some ambiguity as to the applicability of the narrowband eligibility provisions in Sections 90.953(a)-(d) to the Public Safety Broadband Licensee.[582] Accordingly, we sought comment as to whether we should make minor amendments to Section 90.523 to: (a) clarify that the services provided by the Public Safety Broadband Licensee must conform to all the elements of the statutory definition of "public safety services;" and (b) clearly delineate the differences and overlap in the respective eligibility requirements of the narrowband licensees and the Public Safety Broadband Licensee.[583]

315. As a corollary to examining whether the services provided by the Public Safety Broadband Licensee must conform to all the elements of the statutory definition of "public safety services," we also examined whether, under Section 337 of the Act and in furtherance of the policies that led to the creation of the Public Safety Broadband Licensee, the eligible users of the public safety broadband network that are represented by the Public Safety Broadband Licensee should be restricted to entities that provide "public safety services," as defined in Section 337 of the Act.[584] Specifically, we observed that the question of whether the Public Safety Broadband Licensee's service qualifies as a "public safety service" under Section 337(f)(1) of the Act depends in part on the nature of the spectrum

[577] 47 C.F.R. § 90.523.

[578] 47 C.F.R. § 90.523(e).

[579] 47 C.F.R. §§ 90.523(a)-(d).

[580] *Second Report and Order*, 22 FCC Rcd at 15421 ¶ 373. Specifically, we required that the Public Safety Broadband Licensee satisfy the following eligibility criteria: (1) no commercial interest may be held in this licensee, and no commercial interest may participate in the management of the licensee; (2) the licensee must be a non-profit organization; (3) the licensee must be as broadly representative of the public safety radio user community as possible, including the various levels (*e.g.*, state, local, county) and types (*e.g.*, police, fire, rescue) of public safety entities; and (4) to ensure that the Public Safety Broadband Licensee is qualified to provide public safety services, an organization applying for the Public Safety Broadband License was required to submit written certifications from a total of at least ten geographically diverse state and local governmental entities, with at least one certification from a state government entity and one from a local government entity. *See* 47 C.F.R. § 90.523(e).

[581] *Second Further Notice,* 23 FCC Rcd at 8060 ¶ 28.

[582] *Second Further Notice,* 23 FCC Rcd at 8060 ¶ 28.

[583] *Second Further Notice,* 23 FCC Rcd at 8060 ¶ 28.

[584] *Second Further Notice,* 23 FCC Rcd at 8060-61 ¶ 29.

use by the entities to which it grants access to the shared broadband network.[585]

316. We further observed that to the extent that these entities are public safety entities that are accessing the shared network to provide themselves with communications services in furtherance of their mission to protect the safety of life, health or property, the Public Safety Broadband Licensee's services related to the public safety broadband spectrum would conform to the statutory definition of "public safety services" and would comport with the Commission's obligation under Section 337(a)(1) of the Act to allocate a certain amount of spectrum to such services.[586] Under this interpretation, only entities providing public safety services, as defined in the Act, would be eligible to use the public safety spectrum of the shared network of the 700 MHz Public/Private Partnership on a priority basis, pursuant to the representation of the Public Safety Broadband Licensee.

317. In arriving at this interpretation, we observed that, under the statutory definition, a service might be considered a "public safety service" even if its purpose is not solely for protecting the safety of life, health or property, so long as this remains its "principal" purpose.[587] Taken a step further, the service provided by the Public Safety Broadband Licensee—providing public safety entities access to the spectrum for safety-of-life/health/property communications operations—could conceivably include the provision of spectrum access to public safety entities for uses that do not principally involve the protection of life, health or property, provided that the principal purpose of the Public Safety Broadband Licensee's services, on the whole, is to protect the safety of life, health or property.[588] We further observed, moreover, that such a literal reading of the statute could permit the Public Safety Broadband Licensee to provide spectrum access to a small number of entities having little or no connection to public safety whatsoever, and potentially result in entire pockets within its nationwide service area served only by such non-public safety entities.[589]

318. Because such a result would appear inconsistent with the spirit of Section 337(f)(1)(A) of the Act, we sought comment on whether, and to what degree, the Public Safety Broadband Licensee would be statutorily precluded by that subsection from representing and allowing any entity to use the network for services that are not principally for public safety purposes.[590] We also sought comment on whether there are other grounds—specifically, the authorization requirement of Section 337(f)(1)(B)(ii) of the Act and/or public interest reasons—for prohibiting the Public Safety Broadband Licensee from providing network access to non-public safety entities or permitting public safety entities that it represents to use the network for services that do not have as their principal purpose the protection of the safety of life, heath or property, and instead requiring such non-permitted users, including critical infrastructure industry ("CII") users, to be treated as commercial users who would obtain access to spectrum only through commercial services provided solely by the D Block licensee.[591]

319. Comments. We did not receive any comments with respect to whether we should make minor amendments to Section 90.523 of our rules to: (a) clarify that the services provided through the Public Safety Broadband Licensee must conform to all the elements of the statutory definition of "public safety services;" and (b) clearly delineate the differences and overlap in the respective eligibility requirements of the narrowband licensees, set forth in Sections 90.953(a)-(d) of our rules, and the Public

[585] *Second Further Notice,* 23 FCC Rcd at 8061 ¶ 30.

[586] *Second Further Notice,* 23 FCC Rcd at 8061 ¶ 30.

[587] *Second Further Notice,* 23 FCC Rcd at 8061 ¶ 31 (*citing* 47 U.S.C. § 337(f)(1)(A)).

[588] *Second Further Notice,* 23 FCC Rcd at 8061 ¶ 31.

[589] *Second Further Notice,* 23 FCC Rcd at 8061-62 ¶ 32.

[590] *Second Further Notice,* 23 FCC Rcd at 8061-62 ¶ 32.

[591] *Second Further Notice,* 23 FCC Rcd at 8061-62 ¶ 32.

Safety Broadband Licensee, set forth in Sections 90.953(e) of our rules to eliminate any ambiguity regarding the applicability of the former to the latter.

320. We did, however, receive a number of comments addressing the question of whether the Public Safety Broadband Licensee should be prohibited both from providing network access to non-public safety entities (*i.e.*, entities that would not be eligible to hold licenses under Section 337 of the Act), and from allowing the public safety entities that it represents to use the network for services that do not have as their principal purpose the protection of the safety of life, heath or property. The National Public Safety Telecommunications Council ("NPSTC"), for example, observed that "[t]here are common situations across the country where restoring critical infrastructure – gas, electric, water, transportation or telecommunications – is at least as important as public safety use."[592] On that basis, NPSTC argued that "access [to the shared network] needs to be flexible and managed real-time, allowing the subscribers who are critical to the operation at hand, whatever and whomever that might be, use of required network resources."[593] Under NPSTC's approach, access to the shared network by CII entities (and Federal agencies) "would be directed to emergency circumstances and not general use of the network."[594] Other commenters expressed similar views.[595]

321. A few parties, however, argued a more circumscribed view that eligibility for access to the shared network through the Public Safety Broadband Licensee should be limited to entities that have as their principal purpose the protection of safety of life, health or property. APCO, for example, asserted that "there are significant questions as to whether the Communications Act would allow the PSBL to offer service on public safety spectrum to entities not eligible for public safety spectrum under Section 337 of the Act."[596] Accordingly, APCO suggested that the Commission "should require that the D Block licensee provide CII entities with priority access to the commercial portion of the network (secondary, however, to public safety where relevant) consistent with current CII/wireless carrier agreements."[597] The National Regional Planning Council ("NRPC") asserted that the "principal purpose of the [shared network] spectrum should remain for public safety use [and] the PSBL should provide network access only to public safety entities that have as their principal purpose the protection of safety of life, health or property."[598]

322. Discussion. As a preliminary matter, we tentatively conclude that we should revise Section 90.523 of our rules to: (a) clarify that the services provided through the Public Safety Broadband

[592] NPSTC Comments at 17.

[593] NPSTC Comments at 17-18.

[594] NPSTC Comments at 18. NPSTC recommends that the Commission "parallel the core concept of its rules contained in section 90.523. That provision recognizes that critical infrastructure entities that are state or local government agencies may be licensed. It would allow access for Non Government Organizations (NGOs) that have the support of the relevant local or state government agency and the PSBL." *Id*.

[595] *See*, *e.g.*, AASHTO Comments at 12; PSST Comments at 21; NATOA *et al.* Comments at 13; TDC Comments at 2-3; International Municipal Signal Association, International Association of Fire Chiefs, Inc, Congressional Fire Services Institute, and Forestry Conservation Communications Association Joint Comments at 10; American Hospital Association Comments at 3; Association of Emergency Medical Technicians Comments at 4; Mayo Clinic Comments at 4; City and County of San Francisco Comments at 4 n.3; TeleCommUnity Comments at 10; Ericsson Inc. Comments at 5; District of Columbia Comments at 3; Intelligent Transportation Society of America Reply Comments at 3. Joe Hanna Reply Comments at 4; American Petroleum Institute Reply Comments at 5-7.

[596] Association of Public-Safety Communications Officials-International, Inc. Comments at 8.

[597] Association of Public-Safety Communications Officials-International, Inc. Comments at 9.

[598] National Regional Planning Council Comments at 6. *See also* International Association of Fire Fighters Comments at 5.

Licensee must conform to all the elements of the statutory definition of "public safety services;" and (b) clearly delineate the differences and overlap in the respective eligibility requirements of the narrowband licensees, set forth in Sections 90.953(a)-(d), and the Public Safety Broadband Licensee, set forth at Section 90.953(e) to eliminate any ambiguity regarding the applicability of the former to the latter. We believe these clarifications would be accomplished through the rule revisions we are proposing (discussed below) to address the issue of eligibility to access the public safety broadband network.

323. With respect to the question of which entities should be eligible to access the public safety broadband network through the Public Safety Broadband Licensee, while we recognize and appreciate the important functions that CII entities can serve in supporting public safety entities during the resolution of emergencies, we tentatively conclude that both statutory limitations and policy considerations preclude CII entities from accessing the public safety broadband network. We propose specific amendments to Section 90.523 of our rules included in Appendix C to this Third Further Notice to effect such tentative conclusion and to effect the general clarifications discussed above.

324. In arriving at our tentative conclusion, we necessarily begin with an analysis of Section 337 of the Act. Section 337(a)(1) requires the Commission to allocate 24 megahertz of spectrum between 746 MHz and 806 MHz for "public safety services."[599] As stated above, the statutory definition of "public safety services," which is set forth in Section 337(f) of the Act, provides as follows:

> (f) Definitions – For purposes of this section:
>
> (1) Public Safety Services – The term "public safety services" means services –
>
> (A) the sole or principal purpose of which is to protect the safety of life, health, or property;
>
> (B) that are provided -
>
> (i) by State or local government entities; or
>
> (ii) by nongovernmental organizations that are authorized by a governmental entity whose primary mission is the provision of such services; and
>
> (C) that are not made commercially available to the public by the provider.[600]

Section 337(f)(1) specifies, among other criteria, that the sole or principal purpose of the service for which the 700 MHz public safety spectrum is used must be to protect the safety of life, health, or property.[601] While CII entities, such as utility companies, may play an important role on occasion supporting public safety entities to carry out their mission of protecting the safety of life, health, or property, this role is ancillary to the entities' principal purposes, such as providing electricity. By way of contrast, with respect to concerns raised by the American Hospital Association and other health care representative associations, we observe that under these proposed amendments, the sole or principal purpose of the communications needs of hospitals and other health care facilities as well as ambulance and Emergency Medical Services involved in the provision of emergency medical care, are innately to protect the safety of life, health, or property.[602] For example, we envision that in providing health care services to the sick or injured, responding to accident scenes, or in addressing public health emergencies

[599] 47 U.S.C. § 337(a)(1).

[600] 47 U.S.C. § 337(f).

[601] 47 U.S.C. § 337(f)(1)(A).

[602] *See* American Hospital Association Comments at 3; Association of Emergency Medical Technicians Comments at 4; Mayo Clinic Comments at 4.

such as pandemics or poisonous gas exposure, hospitals, health care facilities, and emergency medical service departments would be eligible users of the 700 MHz public safety spectrum.

325. Because CII entities would not be eligible to access the 700 MHz public safety spectrum under Section 337, they also would not be eligible to gain access to this spectrum through the Public Safety Broadband Licensee. Even if authorized by a governmental entity pursuant to Section 337(f)(1)(B)(ii) of the Act, since the sole or principal purpose of the communications of CII entities are not to protect the safety of life, health or property, granting such access to otherwise ineligible CII entities through a *bona fide* eligible entity merely bypasses the separate requirement contained in Section 337(f)(1)(A) of the Act. Permitting the Public Safety Broadband Licensee to provide public safety broadband spectrum access to non-public safety entities also would exceed the carefully prescribed scope of its representation. Specifically, the eligibility criteria for the Public Safety Broadband Licensee requires, among other things, that such licensee be "as broadly representative of the public safety radio user community as possible, including the various levels (*e.g.*, state, local, county) and types (*e.g.*, police, fire, rescue) of public safety entities," and be certified by at least ten geographically diverse state and local governmental entities whose "primary mission is the provision of public safety services."[603]

326. We also believe that permitting CII entities to access the 700 MHz public safety spectrum through the Public Safety Broadband Licensee—and thereby access this spectrum on a priority basis—would not be in the public interest. As we observed in the *Second Further Notice*, given the limited amount of spectrum available to the public safety community, and particularly with respect to spectrum allocated for interoperability purposes, there is no margin for awarding priority access to entities that do not have as their sole or principal purpose the protection of the safety of life, health, or property.[604] Permitting CII entities to access the 700 MHz public safety broadband spectrum would significantly dilute the band's available capacity, because the size of the CII community is relatively much larger than the size of the public safety community itself. We thus believe the public interest would be best served by maximizing broadband spectrum capacity for *bona fide* public safety entities, and maximizing the growth potential for new broadband applications geared towards the needs of the public safety community.[605] In any event, we observe that CII entities may access the shared broadband network on a commercial basis as customers of the D Block licensee(s).

327. To implement our tentative conclusions on the eligibility issues, we are proposing revisions to Section 90.523 of our rules (included in Appendix C hereto). First, we propose to revise the narrowband eligibility criteria to clarify that authorizations to deploy and operate systems in the 769-775 MHz and 799-805 MHz (narrowband) frequency bands are limited to systems the sole or principal use of which is to protect the safety of life, health, or property, and which are not used to provide any service that is made commercially available by the license holder.[606] Second, we propose to add a new provision

[603] 47 C.F.R. § 90.523(e). The scope of the Public Safety Broadband Licensee's representation also is limited by the requirements pertaining to its Articles of Incorporation, including that they incorporate among its purposes that the Public Safety Broadband Licensee "is to represent the interests of all public safety entities to ensure that their broadband spectrum needs are met in a balanced, fair, and efficient manner, in the interests of best promoting the protection of life and property of the American public." *Second Report and Order* at ¶ 375.

[604] *Second Further Notice,* 23 FCC Rcd at 8061-62 ¶ 32.

[605] For these same statutory-based and public interest reasons, we do not believe such concerns would be alleviated by permitting CII entities access to the 700 MHz public safety broadband spectrum only on a limited, case-by-case, emergency basis, as administered locally or through the Public Safety Broadband Licensee. *See*, *e.g.*, The National Association of Telecommunications Officers and Advisors ("NATOA"), the National Association of Counties ("NACo"), the National League of Cities ("NLC"), and the U.S. Conference of Mayors ("USCM") Joint Comments at 13.

[606] *See* proposed Section 90.523(a)(1), Appendix A.

setting forth the eligibility criteria for entities seeking to access the public safety broadband network through the Public Safety Broadband Licensee, which criteria incorporates the narrowband eligibility criteria and requires that the sole or principal purpose of such entities must be to protect the safety of life, health, or property.[607] Third, we propose revisions to the Public Safety Broadband Licensee eligibility criteria to ensure that the services provided through the Public Safety Broadband Licensee conform to all the elements of the statutory definition of "public safety services."[608]

328. *Federal Usage of the Public Safety Broadband Network*. With respect to whether we should modify Section 2.103 of the Commission's rules to limit Federal public safety agency use of the public safety broadband spectrum to situations where such use is necessary for coordination of Federal and non-Federal activities,[609] most parties opposed such a specific limitation. The Association of Public-Safety Communications Officials-International, Inc. ("APCO"), for example, asserts that it "supports a provision that would allow Federal public safety use of the broadband network with the concurrence of the PSBL and local public users in the areas in which the Federal government desires to operate on the network."[610] APCO further contends that "[i]n general, Federal public safety use should be encouraged as a means of improving interoperability in emergency response activities, but not at the expense of providing sufficient spectrum capacity for state and local governments."[611]

329. The Public Safety Spectrum Trust Corporation argues that "the FCC should reaffirm the decision adopted in the Second R&O, wherein the PSST was given exclusive authority to approve Federal usage of the PSBL spectrum, a determination that will be made on a case-by-case basis consistent with the PSST's responsibility to promote interoperable public safety communications."[612] The PSST further observes that "Federal users who do not require priority service on the SWBN are free to accept normal commercial service as regular D Block subscribers."[613]

330. Rivada Networks argues, however, that "the Commission should streamline Section 2.103 to allow the most efficient and effective access of the public safety 700 MHz spectrum for Federal agencies that may be called upon to respond in the event of an emergency and coordinate with non-Federal state and local agencies."[614] According to Rivada, "[s]o long as there is 'mutual agreement between the Federal and non-Federal entities' and that agreement includes coordination procedures to protect against interference, Federal use of this spectrum should be presumptively allowed."[615]

331. Discussion. We believe that we should reaffirm the decision adopted in the *Second Report and Order* to grant the PSBL "exercise of sole discretion, pursuant to Section 2.103 of the

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[607] *See* proposed Section 90.523(b), Appendix A.

[608] *See* proposed Section 90.523(c)(5), Appendix A.

[609] *Second Further Notice,* 23 FCC Rcd at 8092 at ¶ 126.

[610] Association of Public-Safety Communications Officials-International, Inc. Comments at 9.

[611] Association of Public-Safety Communications Officials-International, Inc. Comments at 9. *See also* National Public Safety Telecommunications Council Comments at 18 ("[t]he 700 MHz public safety broadband network should reflect the much envisioned objective of interoperability across all levels of government during an emergency."); National Regional Planning Council Comments at 6 ("All governmental services, including federal and military, should be eligible.").

[612] Public Safety Spectrum Trust Corporation Comments at 18-19. *See also* National Public Safety Telecommunications Council Comments at 18; Ericsson, Inc. Comments at 31.

[613] Public Safety Spectrum Trust Corporation Comments at 19.

[614] Rivada Networks Comments at 6.

[615] Rivada Networks Comments at 6.

Commission's rules, whether to permit Federal public safety agency use of the public safety broadband spectrum, with any such use subject to the terms and conditions of the NSA."[616] Our decision in this regard was based upon the Commission's earlier determination that Section 337 of the Act does not bar Federal Government public safety entities from using the 700 MHz band under certain conditions.[617] Specifically, the Commission determined that, while Section 337 of the Act does not expressly indicate that Federal government entities should be eligible, such "omission simply reflects the fact that the Commission does not license Federal stations."[618] We further observed that Federal entities, although ineligible for Commission licensing in the 700 MHz band, already were eligible to receive authorization to use the 700 MHz public safety spectrum in accordance with the requirements set forth in Section 2.103,[619] which the Commission amended to clarify the permitted Federal use of this band.[620] Key to the Commission's determination were its observations, based on the record then before it, that Federal entities provide noncommercial services the sole or principal purpose of which is to protect the safety of life, health, or property, and that allowing Federal entities to access the 700 MHz band is essential to promoting interoperability.[621]

332. We see no reason to disturb the Commission's previous treatment of Federal use of the 700 MHz public safety spectrum. We agree with APCO that "federal public safety use should be encouraged as a means of improving interoperability in emergency response activities,"[622] and that narrowing our existing rules to permit Federal use of the 700 MHz band only for Federal/non-Federal coordination activities would achieve an opposite result. We observe that contrary to PSST's characterization, such authority need not necessarily be exercised only on a case-by-case basis. To this extent, we agree with Rivada that the Public Safety Broadband Licensee may establish more broad-reaching agreements with Federal public safety entities and thus avoid the need for case-by-case determinations in appropriate situations.[623] Accordingly, we tentatively conclude that we will reaffirm our current rules under which the Public Safety Broadband Licensee has exercise of sole discretion, pursuant to Section 2.103 of the Commission's rules, whether to permit Federal public safety agency use of the public safety broadband spectrum, with any such use subject to the terms and conditions of the NSA.

333. *Mandatory Usage of the Public Safety Broadband Network*. In the *Second Further Notice* we asked whether eligible public safety users should be required to subscribe to the shared

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[616] *See Second Report and Order*, 22 FCC Rcd at 15427 ¶ 383.

[617] *See Second Report and Order*, 22 FCC Rcd at 15427 ¶ 383 n.822 (*citing* Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, WT Docket No. 96-86, First Report & Order and Third Notice of Proposed Rulemaking, 14 FCC Rcd 152, 185 ¶ 66 (1998); 47 C.F.R. § 2.103(b)).

[618] Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, WT Docket No. 96-86, First Report & Order and Third Notice of Proposed Rulemaking, 14 FCC Rcd 152, 185 ¶ 66 (1998).

[619] *See* Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, WT Docket No. 96-86, First Report & Order and Third Notice of Proposed Rulemaking, 14 FCC Rcd 152, 185-86 ¶¶ 67-68 (1998).

[620] *See* 47 C.F.R. § 2.103(b).

[621] *See* Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, WT Docket No. 96-86, First Report & Order and Third Notice of Proposed Rulemaking, 14 FCC Rcd 152, 185 ¶ 65 (1998).

[622] Association of Public-Safety Communications Officials-International, Inc. Comments at 9.

[623] *See* Rivada Networks Comments at 6.

broadband network for service, at reasonable rates, or be subject to some alternative obligation or condition promoting public safety network usage in order to provide greater certainty to the D Block licensee.[624] Among other things, we asked whether we should require the purchase of a minimum number of minutes, and how such obligation might be imposed; whether any such obligation should be conditioned on the availability of government funding for access; and whether we should require public safety users to pay for access with such money.[625]

334. The parties addressing these issues opposed any form of mandatory usage requirements. NPSTC, for example, asserted that, "[s]uch a mandate would be a historic departure from the Commission's role of leaving such choice to the consumer, public or private."[626] The International Association of Fire Fighters asserted that "all public safety agencies must be given the flexibility to choose whether or not to participate based on their own unique public safety needs and obligations."[627] The PSST opposed imposition of a mandatory use or minimum public safety usage requirement on grounds that such concept "is inconsistent with the PSST's understanding of the FCC's original Public/Private Partnership arrangement and with the PSST's belief that network adoption must be entirely voluntary."[628]

335. The City of Philadelphia added that, "[w]here local governments are required to pay user fees over which they have no control, they must have the option of declining participation in the network where they determine the fees are unaffordable or local budget appropriations do not cover them."[629] Moreover, the City of Philadelphia observed that, "[m]andating participation in a national network is not in the public interest because it requires local governments to cede control over service and operations and to accept terms that may not meet the specific communications needs of their public safety agencies."[630] The PSST commented that, "[m]andating public safety use of the network, an option that the PSST does not support, could have the effect of disrupting existing business relationships between commercial operators and public safety organizations."[631]

336. The National Association of Telecommunications Officers and Advisors ("NATOA"), the National Association of Counties ("NACo"), the National League of Cities ("NLC"), and the U.S. Conference of Mayors ("NATOA *et al*") argued that "there should be no mandatory requirement that public safety entities use the proposed network, but there must be a requirement that provides for interconnection of existing networks with the new network."[632]

337. Concerning the availability of government funding for access, the NRPC, for example, argued that "[i]f a local public safety entity elects not to subscribe to the new network, we would request the Commission's consideration to not develop regulatory rules that impose any obligations on the agency

[624] *Second Further Notice,* 23 FCC Rcd at 8063 ¶ 37.

[625] *Second Further Notice,* 23 FCC Rcd at 8063 ¶ 37.

[626] NPSTC Comments at 15.

[627] IAFF Comments at 5. *See also* NRPC Comments at 4; RPC 33 Comments at 4; Lencioni Comments at 1; TeleCommUnity Comments at 11; Virginia Comments at 7; Verizon Wireless Comments at 10; RPC 20 Reply Comments at 15-16.

[628] PSST Comments at 17-18.

[629] Philadelphia Comments at 6. *See also* NPSTC Comments at 15; Lencioni Comments at 1.

[630] Philadelphia Comments at 6.

[631] PSST Comments at 18. *See also* TE M/A-COM Comments at 9.

[632] NATOA *et al.* Comments at 18.

based on the availability of any government grant monies or any monies, regardless of origin."[633] Finally, APCO and NPSTC, also questioned the Commission's legal authority to impose such a mandate.[634]

338. Discussion. We tentatively conclude not to establish any mandate requiring eligible public safety users to subscribe to the shared broadband network for service, or subject such entities to any other alternative obligations or conditions promoting public safety network usage. Specifically, we are concerned that establishing usage mandates would potentially interfere with local public safety needs and obligations unique to their communities, as well as with existing network investments or business relationships with other vendors and service providers. In addition, any mandatory subscription obligation would be inconsistent with our continued expectation that voluntary participation will be driven by the shared network build undertaken by the D Block licensee(s), resulting state-of-the-art broadband applications, and economies of scale made possible under the public/private partnership approach.[635]

2. Provisions Regarding the Public Safety Broadband Licensee

a. Non-Profit Status

339. Background. Among other criteria for eligibility to hold the Public Safety Broadband License that we established in the *Second Report and Order*, we provided that no commercial interest may be held in the Public Safety Broadband Licensee, that no commercial interest may participate in the management of the licensee, and that the licensee must be a non-profit organization.[636] We also indicated, however, that, as part of its administration of public safety access to the shared wireless broadband network, the Public Safety Broadband Licensee might assess "usage fees to recoup its expenses and related frequency coordination duties."[637]

340. In the *Second Further Notice*, we sought to further examine the Public Safety Broadband Licensee's non-profit status, and issues related to alternative funding mechanisms, including excess revenue derived from any access fees that the Public Safety Broadband Licensee might charge. With respect to the requirement that the Public Safety Broadband Licensee be organized as a non-profit organization, in the *Second Further Notice*, we sought comment as to whether we should specify that the Public Safety Broadband Licensee and all of its members (in whatever form they may hold their legal or beneficial interests in the Public Safety Broadband Licensee) must be non-profit entities.[638] While we acknowledged that the Public Safety Broadband Licensee may need to contract with attorneys, engineers, accountants, and other similar advisors or service providers to fulfill its responsibilities to represent the interests of the public safety community, we asked whether the Commission should restrict the Public Safety Broadband Licensee's business relationships pre- and post-auction with commercial entities, and if so, what relationships should and should not be permitted.[639]

341. We also sought comment as to whether we should clarify that the Public Safety Broadband Licensee may not obtain debt or equity financing from any source, unless such source is also a

[633] NRPC Comments at 4. *See also* APCO Comments at 13 (arguing that the Commission lacks authority to require "use of the public safety broadband network [as] a condition of government funding.").

[634] *See* APCO Comments at 13; NPSTC Comments at 15.

[635] *See, e.g.*, *Second Report and Order*, 22 FCC Rcd at 15431 ¶ 396.

[636] *See Second Report and Order*, 22 FCC Rcd at 15421 ¶ 421.

[637] *Id.* at 15426 ¶ 383.

[638] *Second Further Notice*, 23 FCC Rcd at 8064 ¶ 40.

[639] *Second Further Notice* , 23 FCC Rcd at 8064 ¶ 40.

non-profit entity.[640] We asked whether such a restriction would be warranted to ensure that the Public Safety Broadband Licensee is not unduly influenced by for-profit motives or outside commercial influences in carrying out its official functions.[641] We also sought comment on ways to allow necessary financing while still ensuring the independence of the Public Safety Broadband Licensee, such as whether to allow working capital financing from commercial banks and whether to restrict the assets of the Public Safety Broadband Licensee that can be pledged as security for such loans, and/or whether there are other types of loans or alternative funding sources that we should allow the Public Safety Broadband Licensee to employ.[642]

342. As a separate line of inquiry, we sought comment in the *Second Further Notice* on the best way to fund the Public Safety Broadband Licensee's operations. We asked, for example, whether the D Block licensee should be required to pay the Public Safety Broadband Licensee's administrative costs and, if so, whether such obligation should be capped.[643] Assuming government-allocated funding were available, we asked whether such funding mechanisms would be the best solution for funding the Public Safety Broadband Licensee.[644] We further asked whether the Commission has legal authority to support the Public Safety Broadband Licensee's operational expenses through the Universal Service Fund[645] or Telecommunications Development Fund,[646] and whether such approaches would be appropriate.[647]

343. We also sought comment on whether any excess revenue generated by the fees or other sources of financing obtained by the Public Safety Broadband Licensee from non-profit entities should be permitted and, if so, how they should be used.[648] We asked, for example, whether the Public Safety Broadband Licensee should be permitted to hold a certain amount of excess income as a reserve against possible future budget shortfalls or whether such excess income should instead be used for the direct benefit of the public safety users of the network, such as for the purchase of handheld devices.[649] Finally, we sought comment on whether the Public Safety Broadband Licensee may legitimately incur certain reasonable and customary expenses incurred by a business, consistent with the constitution of the Public Safety Broadband Licensee and the nature of its obligations as established by the Commission.[650]

344. Comments. We received comments on most of the issues raised in the *Second Further Notice*, as broken out below.

(i) Clarifying the Public Safety Broadband Licensee's Non-Profit Status.

345. Only a few commenters addressed the question of clarifying the Public Safety Broadband Licensee's non-profit status. NATOA endorsed requirements that "no commercial interest may be held in the Public Safety Broadband Licensee, that no commercial interest may participate in the management of

[640] *Second Further Notice*, 23 FCC Rcd at 8064-65 ¶ 41.

[641] *Second Further Notice*, 23 FCC Rcd at 8064-65 ¶ 41.

[642] *Second Further Notice*, 23 FCC Rcd at 8064-65 ¶ 41.

[643] *Second Further Notice*, 23 FCC Rcd at 8065 ¶ 42.

[644] *Second Further Notice*, 23 FCC Rcd at 8065 ¶ 42.

[645] *See, e.g.,* 47 U.S.C. § 254(c)(1), (h).

[646] *See, e.g.,* 47 U.S.C § 614.

[647] *Second Further Notice*, 23 FCC Rcd at 8065 ¶ 43.

[648] *Second Further Notice*, 23 FCC Rcd at 8065-66 ¶ 44.

[649] *Second Further Notice*, 23 FCC Rcd at 8065-66 ¶ 44.

[650] *Second Further Notice*, 23 FCC Rcd at 8066 ¶ 45.

the licensee, and that the licensee must be a non-profit organization."[651] AT&T and others asserted that the Commission should ensure "that the PSBL must be a nonprofit entity that will use the network solely for public safety purposes."[652] TeleCommUnity argued that "in addition to the public policy argument that favors the requirement that the [PSBL] be a non-profit organization, there could be an argument that Section 337 of the Act requires that the Licensee be so."[653]

346. Discussion. We agree with commenters who argue that the Public Safety Broadband Licensee should remain a non-profit entity and see no reason at this time to alter the non-profit status of the Public Safety Broadband Licensee. As discussed in the following paragraphs and elsewhere in this Third Further Notice, we are proposing significant steps to insulate the Public Safety Broadband Licensee from undue commercial influence, and additional reporting and auditing requirements to provide greater oversight of the Public Safety Broadband Licensee's activities. We believe these changes should further clarify the non-profit requirement of the Public Safety Broadband Licensee.

(ii) Restrictions on PSBL Business Relationships.

347. With respect to the question of restricting the Public Safety Broadband Licensee's business relationships pre- and post-auction with commercial entities generally, the record reflects mixed views. The PSST asserted that "the current restrictions regarding its agent/advisor relationships are more than adequate to prevent improper commercial influence, and the FCC should not place additional restrictions on the PSST's business relationships and its agent/advisor relationships."[654] Instead, the PSST argued, "the Commission should provide greater clarity regarding its restriction on 'commercial interests' participating in management of the license."[655] The PSST observed that the current rules governing the PSBL "allow for arrangements with third parties to assist with the management or operation of the public safety-side of the network," which arrangements the PSST asserted "are invaluable for a variety of reasons, including access to expertise and funding, in assisting the PSST to do its job effectively."[656]

348. The PSST further indicated that while "there have been abuses in the past involving impermissible relationships between licensees and third parties that would cause the FCC to adopt [] prophylactic measures," it is also important "that the FCC not so restrict the PSBL in its ability to contract for needed services that it is prevented from fulfilling the very functions that the FCC has determined need to be undertaken on behalf of public safety."[657] In this regard, the PSST added that it "has a strong preference for outsourcing services to others where practical and appropriate, thereby avoiding the need for a large internal staff with associated employer obligations."[658] The PSST further argued that "provision of management services or other types of support that are consistent with [the] *Intermountain Microwave* or *Motorola* [standards for *de jure* and *de facto* control] and would not involve prohibited

[651] NATOA *et al.* Comments at 14-15 (internal footnote omitted).

[652] AT&T Comments at 19, 21. *See also* Eads Comments at 1; Lencioni Comments at 2; Philadelphia Comments at 5.

[653] TeleCommUnity Comments at 11.

[654] PSST Comments at 49.

[655] PSST Comments at 49.

[656] PSST Comments at 49.

[657] PSST Comments at 49.

[658] PSST Comments at 50.

economic interests should be permitted under 'incentive-compatible' standards."[659] In addition, the PSST argued that "any new 'incentive-compatible' rules must not unduly restrict the PSST's ability to obtain funding, so long as there is no commercial interest participating in management of the licensee."[660]

349. Finally, the PSST states that its "engagement of Cyren Call is consistent with those FCC requirements."[661] The PSST explained that "[b]ecause it had no governmental or other funding or assets to serve as collateral for a commercial loan, [it] obtained a deferral from Cyren Call of amounts due, and even obtained an advance loan from Cyren Call that reflects arm's-length, normal commercial terms."[662] The PSST asserts, however, that "Cyren Call has no management relationship with or management role within the PSST, has no legal or beneficial interest in the PSST, and does not participate in the PSST's management."[663] The PSST further asserts that "[t]here are no conditions, covenants or other features of Cyren Call's service agreement with or loan to the PSST that would allow Cyren Call to influence the PSST's policy or management determinations."[664] Cyren Call stated that its arrangements with the PSST did not provide it "with any measure of control or undue influence over the PSST's activities or its decision making process."[665]

350. NPSTC asserted that the "experience and expertise in deploying and operating wireless communications is a narrow field" and, thus, "the PSBL should have the ability to select its advisors to discharge its duties effectively."[666] APCO, however, noted that "the Commission should require that the PSBL adopt strict conflict of interest requirements that include prohibiting its advisors from engaging in business activities resulting from the advice provided to the PSBL [and] from establishing business relationships with equipment vendors, service providers, and others with a financial interest in the decisions of the PSBL."[667] Further, as explained more fully below, some commenters expressed concerns regarding the propriety of permitting the PSBL to be funded by any of its for-profit advisors.

351. Discussion. We agree with APCO that we should subject the Public Safety Broadband Licensee and its advisors, agents, and managers to strict conflict of interest requirements. We believe safeguards should be implemented to ensure that no entity is able to influence the Public Safety Broadband Licensee's pre-auction activities in a manner that might benefit that entity's, or a related entity's, plans to participate in the upcoming D Block auction, or to gain any advantage as compared to other bidders by virtue of information obtained from the Public Safety Broadband Licensee during the course of its relationship with the Public Safety Broadband Licensee. Thus, we tentatively conclude that we should adopt conflict of interest requirements making entities that are serving as advisors, agents, or managers (or their related entities, including affiliates and those controlled by any officer or director of such an entity) of the PSBL ineligible to become a D Block licensee unless such an applicant completely severs its business relationship with the Public Safety Broadband Licensee no later than 30 days

[659] PSST Comments at 50 (citing *Intermountain Microwave*, 12 FCC 2d 559 (1963); Applications of Motorola, Inc. for 800 MHz Specialized Mobile Radio Trunked Systems, File Nos. 507505 *et al.*, *Order* (issued July 30, 1985) (Private Radio Bureau)).

[660] PSST Comments at 50.

[661] PSST Comments at 50-51.

[662] PSST Comments at 51.

[663] PSST Comments at 51.

[664] PSST Comments at 51.

[665] Cyren Call Reply Comments at 6.

[666] NPSTC Comments at 21. *See also* Hanna Reply Comments at 2; NASEMSO Reply Comments at 2.

[667] APCO Comments at 17.

following the release date of an order adopting final rules in this proceeding.[668] For purposes of this eligibility rule, we propose to define the terms officer, director, and affiliate in the same manner as those terms are currently defined in Section 1.2110(c) of the Commission's rules, which govern competitive bidding, relating to designated entity eligibility because we have found those definitions effective when assessing relationships among parties related to an applicant.[669] We seek comment on this tentative conclusion and proposed rule.

352. We also tentatively conclude that we should adopt conflict of interest requirements requiring entities that are serving as advisors, agents, or managers (or their related entities, including affiliates and those controlled by any officer or director of such an entity) of the PSBL from establishing business relationships or otherwise being affiliated with, or holding a controlling interest in, equipment vendors, service providers, or other entities that have a direct financial interest in the decisions of the PSBL.[670] These requirements would apply to both pre-auction and post-auction activities. We seek comment on this tentative conclusion and proposed rule.

353. We do not believe that the regulations we propose today will interfere with the Public Safety Broadband Licensee's ability to discharge its duties effectively. We also consider it necessary to implement regulations in order to prevent impropriety and/or the appearance of impropriety in the Public Safety Broadband Licensee's discharge of its duties. We agree with the PSST on the necessity of avoiding regulations that overly restrict the Public Safety Broadband Licensee's ability to engage in necessary transactions with third parties. We believe that the requirements we propose here strike the appropriate balance between providing the Public Safety Broadband Licensee with the flexibility it requires to utilize expert advisors, agents, and managers, and to make necessary contracts with third parties, while ensuring that the Public Safety Broadband Licensee's decisions are insulated from potential undue influences.

(iii) Funding of the PSBL Through the D Block Licensee.

354. With respect to funding the PSBL through the D Block licensee, there was support for such action, in various forms, including via an upfront payment as well as through recurring payments, such as in the form of a spectrum lease fee. The PSST stated that, as a non-profit, tax-exempt organization subject to IRS rules, the PSST "will need to charge usage fees to public safety users, and it will need to obtain a lease payment from the D Block licensee."[671] The PSST added that "[b]ecause the bulk of the spectrum likely will be used by the D Block licensee to provide services from which it expects to realize a profit, the PSST believes it logically should obtain most of its funding from the lease payment."[672] The PSST, however, acknowledged that "there must be an appropriate balance of public safety fees paid for SWBN usage and a D Block spectrum lease payment," which the PSST argued should be evaluated, along with related issues, and addressed in the NSA.[673]

355. APCO asserted that, lacking conventional forms of security, it will be difficult for the PSBL to obtain debt financing and, therefore, an FCC rule provision "that a specific dollar amount must

[668] In this regard, we note that Cyren Call currently has an outstanding loan extended to the PSST. We seek comment on whether Cyren Call should be allowed to remain a creditor of the PSST if it wishes to be eligible to become a D Block licensee.

[669] *See* 47 C.F.R. § 1.2110(c).

[670] For purposes of defining "affiliated" and "controlling interest," we propose to use the definitions contained at 47 C.F.R. § 1.2110(c).

[671] PSST Comments at 23-24.

[672] PSST Comments at 23-24.

[673] PSST Comments at 24.

be made available by the D Block licensee to the PSBL to pay back loans obtained from financial institutions to provide operational funds" would be appropriate.[674] APCO further suggested "requiring the D Block licensee to establish a trust fund with a specified dollar amount that the PSBL would be allowed to draw from and pay its operating expenses … provided there is a clearly established and supported operating budget."[675] APCO stated that the Commission should continue to require that the D-Block winner pay a spectrum lease fee to the Public Safety Broadband Licensee as part of the NSA, but asked the Commission to provide "some further definition … to provide auction participants with greater certainty," and also stated that a "fee cap may also be appropriate."[676]

356. The NRPC stated that the "D Block licensee should be required to pay all costs identified as necessary with regard to the [PSBL's] administrative costs."[677] In the context of its revised plan for implementing a shared broadband network, Televate proposed that the "D Block winner provides billing services to the public safety community and collects a service fee, per line, to fund PSST baseline operations."[678]

357. Both the PSST and APCO asserted that the PSBL should be allowed to obtain a lease payment from the D Block licensee to cover the PSBL's operational funding.[679] NENA stated that "in the absence of government funding for the public safety broadband licensee, the licensee must be permitted to generate revenues to ensure its viability."[680] AT&T asserted that the "Commission must promulgate guidelines that address the spectrum usage fees the PSBL may charge commercial partners for access to 700 MHz public safety broadband spectrum," and these guidelines "should clarify that any lease agreements be negotiated using commercial practices for cost recovery for the PSBL."[681] AT&T urged that these guidelines "address how charges for network usage and spectrum access will be structured."[682]

358. With respect to excess revenues, the PSST stated that "there would be nothing improper in the PSST undertaking an activity that might generate revenue that exceeded its expenses, provide the activity was in furtherance of public safety interests."[683] APCO suggested that "all funds generated through spectrum lease fees in excess of those deemed appropriate to cover the operating expenses of the PSBL be held in trust with a not-for-profit foundation [from which] public safety users have the ability to apply for grant funding … to be used to cover the cost of equipment, devices, and any operating fees associated with the use of the nationwide broadband network."[684] APCO also asked the Commission not to "impose any arbitrary restrictions on [any] excess revenues … of the PSBL."[685] APCO did, however,

[674] APCO Comments at 18.

[675] APCO Comments at 18.

[676] APCO Comments at 18. However, APCO warned against the D-Block winner directly paying the PSBL's expenses "as that would create potential conflicts of interest." *Id*.

[677] NRPC Comments at 5.

[678] Televate Comments at 13.

[679] *See* PSST Comments at 23-24; APCO Comments at 18.

[680] NENA Comments at 4-5.

[681] AT&T Comments at 19.

[682] AT&T Comments at 19. AT&T argued that the lack of this information "was a factor cited as contributing to the failed D Block auction." *Id*.

[683] PSST Comments at 22.

[684] APCO Comments at 18-19.

[685] APCO Comments at 19.

indicate support for Commission oversight of the PSBL's use of any excess revenues.[686] Region 33 states that any excess revenues should "be used to offset operating expenses with the remainder going toward infrastructure improvements."[687] Region 33 also adds "limiting the amount of time excess funds can be retained" would allow use of excess income as a reserve against possible future budget shortfalls, but also provide funding for "improvements to infrastructure or general rate reductions for users."[688]

359. Discussion. We agree with commenters that it is reasonable for the D Block licensee(s) to cover the Public Safety Broadband Licensee's administrative and operating expenses. The Public Safety Broadband Licensee's non-profit status as discussed above and our related concerns that no entangling financial relationships compromise its core mission of representing the public safety community point to establishing a direct funding mechanism between the D Block licensee(s) and the Public Safety Broadband Licensee. Further, we find merit in ensuring that the administrative and operating expenses of the Public Safety Broadband Licensee are finely tuned to its core mission and fully transparent to key stakeholders. Thus, we tentatively conclude that the Public Safety Broadband Licensee shall establish an annual budget and submit this budget to the Chief, WTB and Chief, PSHSB, on delegated authority, for approval. The proposed annual budget to be submitted by the Public Safety Broadband Licensee would enable the Commission to ensure that the Public Safety Broadband Licensee is acting in a fiscally responsible manner and not engaging in activities that exceed the scope of its prescribed roles and responsibilities. The Public Safety Broadband Licensee already is required to submit a full financial accounting on a quarterly basis,[689] which helps serve the same purpose. As an additional measure, the PSBL also would need to have an annual audit conducted by an independent auditor. In addition, we are proposing to provide that the Commission reserves the right, as delegated to the Chief, PSHSB, to request an audit of the Public Safety Broadband Licensee's expenses at any time.

360. With respect to the mechanism of funding of the Public Safety Broadband Licensee, we tentatively conclude that the nationwide D Block licensee or, if the D Block is licensed on a regional basis, each regional D Block licensee, will make an annual payment to the Public Safety Broadband Licensee of, in the aggregate, the sum total of $5 million per year. These payments would be in consideration for the D Block licensee(s)' leased access on a secondary basis to the public safety broadband spectrum. In the event that the D Block is licensed on a regional basis, the Commission will specify after the close of the auction the annual payments required for each license won at auction, such that the total $5 million in annual payments to the Public Safety Broadband Licensee is apportioned on a per region basis, based upon total pops per region. Because these figures are tied to the regional D Block licenses actually won at auction, the Commission may adjust them to account for any regional D Block licenses that may go unsold in the next D Block auction but which are successfully reauctioned on a subsequent date. The annual payment funds will be placed into an escrow account managed by an unaffiliated third party, such as a major commercial financial institution, for the benefit of the Public Safety Broadband Licensee. We will require the Public Safety Broadband Licensee to seek approval of its selected escrow account manager from the Chief, PSHSB. The Public Safety Broadband Licensee would draw funds on this account to cover its annual operating and administrative expenses in a manner consistent with its submitted annual budget for that fiscal year.[690] The entirety of the Public Safety Broadband Licensee's annual operating budget shall be based on these annual payments. We seek comment on these tentative conclusions and proposals, including when the D Block licensee(s) should

[686] APCO Comments at 19.

[687] RPC 33 Comments at 6.

[688] RPC 33 Comments at 6.

[689] *See* 47 C.F.R. § 90.528(g).

[690] In the event that the PSST continues to serve as the PSBL, it may, as part of its first submitted annual budget, account for its administrative and operational expenses to date.

make their initial payment to the Public Safety Broadband Licensee. Specifically, comment is requested on whether the D Block licensee(s) should make funding available prior to the commencement of the NSA negotiation process. As a related matter, we also seek comment on when we should first require the Public Safety Broadband Licensee to develop its first annual budget, and when we should require the independent audit.

361. To the extent that the Public Safety Broadband Licensee's actual operating expenses for a given fiscal year turn out to be less than its proposed budget, such that there are excess funds left over at the end of that fiscal year from the annual payment(s) made by the D Block licensee(s) at the beginning of that year, those excess funds would be applied towards the Public Safety Broadband Licensee's funding of administrative or operational expenses for the following fiscal year, or to fund secondary activities, such as the purchase of equipment for the benefit of individual public safety agencies. We expect that the various reporting and auditing requirements will provide the Commission with sufficient ability to ensure that the Public Safety Broadband Licensee's expenses are reasonable and that it is operating within the scope of its prescribed role and responsibilities.[691]

362. Finally, in light of the funding mechanism we propose above, we tentatively conclude that we will not permit the Public Safety Broadband Licensee to charge a separate lease fee to the D Block licensee(s) for their use of the public safety broadband spectrum. As noted elsewhere, given the funding mechanism we are tentatively proposing above, we also are tentatively proposing not to permit the Public Safety Broadband Licensee to obtain loans or financing from any other sources.

(iv) Funding of the PSBL Through the Federal Government.

363. Commenters generally questioned the legality of funding the Public Safety Broadband Licensee's operations through the Universal Service Fund ("USF") and/or Telecommunications Development Fund ("TDF"). APCO, for example, asserted that from a "public policy perspective, there is much to support using USF" to support the PSBL, but noted "potential legal issues" in that the PSBL is not a common carrier.[692] NPSTC observed that the "revenue base of [the USF and TDF] is already subject to varying constraints and demands, if not controversy," concluding that "[t]he risks associated with these alternatives appears to outweigh any potential benefit."[693]

364. With respect to other sources of Federal funding for the PSBL, many commenters supported such action, noting Congresswoman Jane Harmon's proposed legislation[694] to achieve this result.[695] NATOA, for example, asserted that "government funding of the PSBL is the best option to preserve the licensee's independence from commercial interests."[696]

365. Spectrum Acquisitions proposed a revised band plan leading to increased D Block spectrum which, when auctioned, could "provide additional funds to be transferred to the PSST."[697]

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[691] As discussed elsewhere, we propose certain limitations on the role and responsibilities of the Public Safety Broadband Licensee, which should lead to significantly decreased expenses than what may have originally been envisioned by the PSST.

[692] APCO Comments at 19. *See also* PSST Comments at 25. However, the PSST does recommend use of the USF and TDF to fund the D Block licensee's activities. *Id*.

[693] NPSTC Comments at 20-21.

[694] *See* Public Safety Broadband Authorization Act of 2008, H.R. 6055, 110th Cong. (2008).

[695] *See* AT&T Comments at 21; Philadelphia Comments at 5; NRPC Comments at 5; TeleCommUnity Comments at 12; RPC 33 Comments at 5; RPC 20 Reply Comments at 18.

[696] NATOA *et al.* Comments at 15.

[697] SAI Comments at 13.

Hanna suggested using "revenues generated from pending auctions, to provide a funding stream to all the PSST/PSBL to operate in an independent and transparent manner."[698] The IAFF suggested establishment of "a grant program to fund the administrative and operational costs of the public safety licensee, thus eliminating the need for the public safety licensee to procure such funding from for-profit entities."[699]

366. Discussion**.** As an initial matter, we do not believe that the USF or TDF funding programs are appropriate for funding the Public Safety Broadband Licensee's operations. In the case of USF, we observe that the USF program ultimately is intended to fund actual services, whereas the context for exploring USF funding in this proceeding is to fund the day-to-day administrative operations of the Public Safety Broadband Licensee.[700] Moreover, USF funding is limited to "eligible telecommunications carriers" ("ETC"),[701] and as the PSST observes, to be designated as an ETC, the Public Safety Broadband Licensee "would need to be a common carrier, which it is not and cannot become."[702]

367. With respect to the TDF, as currently constituted, this program appears inappropriate for funding the Public Safety Broadband Licensee's operations. Congress established the TDF in Section 707 of the Telecommunications Act of 1996[703] as a mechanism to promote access to capital for small businesses in the telecommunications industry, stimulate the development of new technology, and support delivery of universal service.[704] The TDF, a non-profit corporation, essentially functions as a venture capital fund, making loans to "eligible small business[es]" based upon business plans and related considerations.[705] As such, the TDF takes equity positions in the companies that seek its assistance, and makes funding decisions largely based upon the business case of the potential borrower, both of which are inapposite to the non-profit status of the Public Safety Broadband Licensee and its operations. Moreover, since the TDF program is a statutory entity with no implementing FCC regulations, accommodating the funding of the Public Safety Broadband Licensee by the TDF would require legislation .

368. Regarding commenters' other suggested sources for Federal funding of the PSBL, while we agree that government funding of the PSBL may well be the best option to preserve the licensee's independence from commercial interests, we note that we have no control over Congressional disbursement of funds. Moreover, the use of auction revenues or Federal grants for the purpose of funding the PSBL would also require Congressional legislation.

(v) Restrictions on Financing.

369. With regard to the issue of implementing restrictions on financing that would facilitate necessary funding while still ensuring the independence of the Public Safety Broadband Licensee, the comments again reflected mixed views.

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[698] Hanna Reply Comments at 2-3.

[699] IAFF Comments at 3.

[700] *See*, *e.g.*, 47 U.S.C. § 254(c)(1) ("In general.— Universal service is an evolving level of telecommunications *services* . . .") (*emphasis added*); 47 U.S.C. § 254(e) ("A carrier that receives [USF] support shall use that support only for the provision, maintenance, and upgrading of facilities and services for which the support is intended.").

[701] *See* 47 U.S.C. § 254(e).

[702] PSST Comments at 25 (*citing* 47 U.S.C. § 214(e)).

[703] Pub. L. No. 104-104, § 707, 110 Stat. 56, 47 U.S.C. § 614.

[704] *See* 47 U.S.C. § 614(a)**.**

[705] *See* 47 U.S.C. § 614(f). TDF funds may only be used for: "the making of making of loans, investments, or other extensions of credits to eligible small businesses"; provision of financial advice to "eligible small businesses"; conducting research; paying the TDF's operating expenses; and "other services" consistent with the TDF's purposes. See 47 U.S.C. § 614(e).

370. The PSST stated that in its early years of operation it "likely will need to borrow money" and the Commission "should continue to allow the PSBL to secure ordinary commercial loans at reasonable rates."[706] The Virginia Fire Chiefs stated that if "neither Congress nor FCC can provide … funding, it should not deny the PSST the ability to fund itself using methods commonly in use by other non-profit entities."[707] AASHTO supported the "Commission's concern [that] the holder of the PSBL is representative of all public safety groups," but urged the Commission to "strongly consider if the imposition of any additional conditions, mandates, or restrictions place on one not-for-profit licensee would apply equally to all other not-for-profit licensees."[708] AASHTO further argued that "[i]mposition of FCC regulations above those requirements of the [IRS] only obfuscate the issue and do not add clarity or transparency."[709]

371. APCO argued that "[e]quity funding from any sources should be prohibited, as that would undermine the independence and non-profit status of the PSBL."[710] APCO further asserted that "the PSBL must have the ability to seek debt financing (*i.e.*, loans) to fund its operations, and those loans would almost certainly need to be from banks or other "for profit" institutions."[711] NATOA argued that the PSBL should not be allowed to "obtain debt or equity financing from any source … unless such source is also a non-profit entity."[712] Peha asserted that prohibiting the PSBL from accepting funds from for-profit entities "is a useful restriction, but not a sufficient restriction," because some entities might qualify as non-profit yet have missions that would make it "problematic if they funded the PSBL."[713] Accordingly, Peha argued that the funding "should come from a source whose unambiguous objective is either to serve the public interest, or to serve public safety."[714]

372. As indicated above, commenters also opposed allowing the PSBL to obtain funding from any of its agent/advisors. APCO, for example, contended that the "agent/advisor's funding of the PSST and the resulting debt creates at least a perception that the agent/advisor could exert undue influence over the PSST."[715] APCO further contended that such funding scenario "imposes a financial burden that could interfere with the PSST's mission."[716] Accordingly, APCO asserted that "the Commission's rules should prohibit the PSBL from borrowing funds from entities that provide substantial services to the PSBL."[717]

373. Peha espoused a similar view, noting that by obtaining funding from its advisor, "the PSST has probably lost the option of choosing a new advisor if it is ever unhappy with the current one …"[718] Peha observed that where the PSBL's advisor also loans money to the PSBL, the advisor then "has

[706] PSST Comments at 23 n. 48.

[707] Virginia Fire Chiefs Comments at 2. *See also* RPC 33 Comments at 7; NPSTC Comments at 21; Northrop Grumman Comments at 12; NAEMT Comments at 3-4; AASHTO Comments at 14.

[708] AASHTO Comments at 7.

[709] AASHTO Comments at 8.

[710] APCO Comments at 17.

[711] APCO Comments at 17.

[712] NATOA *et al.* Comments at 15. *See also* Philadelphia Comments at 5.

[713] Peha Comments at 10.

[714] Peha Comments at 10.

[715] APCO Comments at 17.

[716] APCO Comments at 17.

[717] APCO Comments at 17. *See also* APCO Comments at 17-18 ("[An] appropriate provision would be to prohibit debt financing from any entity that provides services to or otherwise has business relationships with the PSBL.").

[718] Peha Comments at 9-10.

a great deal to lose if the PSBL is unable to reach agreement with a commercial provider, as the loan will never be repaid," but "has nothing to lose if the PSBL reaches an agreement that fails to meet the needs of a single public safety organization."[719] Verizon Wireless argued that a single entity that both loans money and serves as an advisor to the PSBL "raises issues concerning potential conflicts," and that, in such instances, the Commission "should take steps to ensure that the no-commercial-profit principal is not violated."[720]

374. Discussion**.** As indicated above, we are proposing that funding for the Public Safety Broadband Licensee's operational and administrative costs would come through the annual payment to the Public Safety Broadband Licensee of one percent of the amount of the D Block licensee's gross winning bid, but not to exceed the sum of $5 million per year. We believe this funding mechanism will make it unnecessary for the Public Safety Broadband Licensee to seek third party loans to fund start-up and ongoing operations. Thus, we propose to clarify that the Public Safety Broadband Licensee may not obtain debt or equity financing from any source. As commenters point out, the independence of the Public Safety Broadband Licensee may be unduly influenced by for-profit motives or outside commercial influences in carrying out its official functions were it allowed to enter into financing agreements with third party, for profit entities. For similar reasons, we propose to prohibit the acquisition of any financing, whether debt or equity, from Public Safety Broadband Licensee agents, advisors or any entity that provides services to the Public Safety Broadband Licensee.[721] Further, we remain concerned that any financial arrangement beyond those described below with respect to funding from the D Block licensee(s) would impose a financial burden that could compromise the functioning and mission of the Public Safety Broadband Licensee. Thus, we propose to prohibit the Public Safety Broadband Licensee from entering into any financial arrangements with third party, non-profit entities for the purpose of securing funding.

b. Fees for Services Provided to Public Safety Entities

375. Background. In the *Second Report and Order*, we provided guidance concerning the service fees that the D Block licensee could charge public safety users for their access to and use of the public safety broadband network and, in times of emergency, to the D Block spectrum.[722] We also discussed the importance of the D Block licensee's ability to offer commercial services using the public safety broadband spectrum leased from the Public Safety Broadband Licensee.[723]

376. We required that all service fees – including service fees that the D Block licensee would charge public safety users for normal network service using the public safety broadband spectrum and for their priority access to the D Block spectrum – be specified in the Network Sharing Agreement.[724] We encouraged the parties to negotiate a fee agreement that incorporates financial incentives for the D Block licensee based on the number of public safety entities and localities that subscribe to the service.[725] We also observed that, for the negotiation of reasonable rates, typical commercial rates for analogous services might be useful as a guide, but that the negotiated rates may in fact be lower than typical commercial rates

[719] Peha Comments at 10.

[720] Verizon Wireless Comments at 34. *See also* AT&T Comments at 19, 21; IAFF Comments at 3; RPC 20 Reply Comments at 17; Verizon Wireless Reply Comments at 23-26.

[721] We include any equipment manufacturer financing to support the acquisition of equipment for public safety users.

[722] *Second Report and Order*, 22 FCC Rcd at 15448-49 ¶¶ 450-52.

[723] *Second Report and Order*, 22 FCC Rcd at 15437-39 ¶¶ 414-19, 15441 ¶ 425.

[724] *Second Report and Order*, 22 FCC Rcd at 15448 ¶ 45.

[725] *Second Report and Order*, 22 FCC Rcd at 15448 ¶ 450.

for analogous services.[726] We added that our expectation was that the winning bidder of the D Block license and the Public Safety Broadband Licensee would negotiate a fee structure for priority access to the D Block in an emergency that will protect public safety users from incurring unforeseen (and unbudgeted) payment obligations in the event that a serious emergency necessitates preemption for a sustained period.[727]

377. In the *Second Further Notice*, we invited comment on whether we should reconsider any aspect of the rules regarding service fees to be paid by public safety users, including any applicable fees for normal network service and fees for priority access to the D Block in an emergency.[728] We specifically sought comment on whether we should clarify any aspect of these service fees that was left to negotiations.[729] We also asked whether we provided adequate guidance in the *Second Report and Order* to enable the parties to negotiate reasonable rates for all fees, or whether we should adopt a more detailed fee structure or formula to facilitate negotiations on this issue.[730] We asked, for example, whether we should specify that the D Block licensee is entitled to charge rate-of-return or cost-plus rates, taking the incremental costs of public safety network specifications and other costs attributable uniquely to public safety users into account.[731] Alternatively, we asked whether requiring public safety users to pay the same rates as commercial users would be sufficient.[732] We further asked whether we should mandate that public safety users be entitled to receive the lowest rate that the D Block licensee offers to its commercial users for analogous service.[733]

378. We also sought comment on whether particular uses of the public safety broadband network by public safety users should be free and others fee-based, and upon what bases could such distinction should be made.[734] In this regard, we asked whether it is practical to use service- and context-based distinctions, such as between voice and advanced data services, mission-critical and non-mission-critical communications, emergency and non-emergency events, priority and non-priority access, or similar metrics.[735] Alternatively, we asked whether it would be preferable to rely on technical distinctions, such as a specified number of minutes or bits, a percentage of network capacity, or similar metrics.[736] Finally, we asked whether either approach would provide sufficient certainty to public safety users and/or the commercial D Block licensee.[737]

379. Comments. A number of commenters addressed whether the Commission should more clearly define the fees to be charged to public safety users. AT&T, for example, asserted that "it is

[726] *Second Report and Order*, 22 FCC Rcd at 15449 ¶ 451.

[727] *Second Report and Order*, 22 FCC Rcd at 15449 ¶ 451. Elsewhere, we stated that this "[p]riority service, although provided to public safety, will still be commercial, and will not appreciably impair the D Block licensee's ability to provide commercial services to other parties." *Id*. at 15437 ¶ 413.

[728] *Second Further Notice*, 23 FCC Rcd at 8094 ¶ 132.

[729] *Second Further Notice*, 23 FCC Rcd at 8094 ¶ 132.

[730] *Second Further Notice*, 23 FCC Rcd at 8094 ¶ 132.

[731] *Second Further Notice*, 23 FCC Rcd at 8094 ¶ 132.

[732] *Second Further Notice*, 23 FCC Rcd at 8094 ¶ 132.

[733] *Second Further Notice*, 23 FCC Rcd at 8094 ¶ 132.

[734] *Second Further Notice*, 23 FCC Rcd at 8094-95 ¶133.

[735] *Second Further Notice*, 23 FCC Rcd at 8094-95 ¶133.

[736] *Second Further Notice*, 23 FCC Rcd at 8094-95 ¶133.

[737] *Second Further Notice*, 23 FCC Rcd at 8094-95 ¶133.

critically important that the Commission provide additional guidance in this area … to enable potential commercial participants to evaluate the financial prospects of this venture."[738] Peha argued that the fees should be set in advance of the auction because "no public safety agency will purchase equipment to use a system unless it can be certain that the monthly fees will be reasonable for the life of that equipment, if not indefinitely."[739] Similarly, Mercatus urged the Commission to provide "more specificity on what the D Block licensee may charge public safety users."[740]

380. The PSST indicated that it "understands the desire by some parties that service fees be set prior to the auction, [but] sees no reasonable way of doing so."[741] Specifically, the PSST argued that "[n]etwork service fees will and should have some correlation to network costs. But those costs will vary considerably depending on the D Block winner."[742] In this regard, the PSST observed that "[a]n incumbent with built-out infrastructure and an in-place retail service business will have different requirements than a new entrant that would need to build a network from scratch or from a winner that elects to operate on a wholesale-only basis."[743] Accordingly, the PSST argued that "it is not possible to determine service fees prior to knowing the identity and business plans of the D Block winner."[744]

381. The PSST added that it is "opposed to allowing the D Block licensee to recoup the incremental cost of a public safety-quality build from public safety users," which arrangement the PSST argued would "not be materially different than if the PSST were to pay an incumbent wireless carrier to augment its existing facilities to support a public safety-grade 700 MHz system, particularly if the carrier was deploying its own 700 MHz network."[745] According to the PSST, the "better approach is to encourage the parties to negotiate a mutually acceptable rate(s) for public safety entities, one that will encourage widespread public safety adoption and that also provides the D Block operator with reasonable compensation consistent with the benefits it is receiving from the partnership arrangement," but in all cases, "the FCC should continue to specify a requirement (or at least an expectation) that the fees paid by public safety users should be substantially lower than the fees paid by the D Block licensee's commercial customers."[746]

382. Northrop Grumman urged the Commission "to adopt an objective method for the determination of fees, including a mechanism to segregate and define the charges to public safety users, with cost recovery using a "no profit, no loss" or similar framework."[747] According to Northrop Grumman, such an approach would "align the incentives of the D Block licensee and the PSBL toward serving public safety's needs, and ensure that the costs of public safety's needs are met without conflicting with overall viability of the shared network."[748]

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[738] AT&T Comments at 20.

[739] Peha Comments at 13.

[740] Mercatus Comments at 2.

[741] PSST Comments at 37.

[742] PSST Comments at 37.

[743] PSST Comments at 37.

[744] PSST Comments at 37.

[745] PSST Comments at 36.

[746] PSST Comments at 36-37.

[747] Northrop Grumman Comments at 8.

[748] Northrop Grumman Comments at 8.

383. Televate contended that the "maximum service price for priority public safety services must be discounted from list rates by at least 20 percent."[749] Televate also suggested that bidders should somehow be credited for offering "higher levels of discounts off commercial list prices" and "innovative methods to bring the maximum number of public safety personnel on to the network."[750] Gerard Eads, a "communications administrator," urged the Commission to require "that public safety agencies access the system at no recurring charge" and subsidize their fees using revenue from the auction.[751]

384. NTCH proposed the imposition of "a relatively modest usage fee," the proceeds from which could "pay the ongoing costs of the public safety licensee as well as system maintenance."[752] According to NTCH, the service could still be provided at a discount to costs currently incurred by public safety entities and "the charge to public safety users for unlimited calling would be equivalent to similar charges to a private sector user for unlimited calling plans and data transfers over the network."[753] US Cellular asserted that to "increase the attractiveness" of less populated geographic areas in the D Block, the Commission could make "the service fees more commercially attractive (in areas with low volumes of public safety usage, lower charges for the D Block licensee's use of the public safety spectrum, and higher charges for public safety agencies' use of the D Block spectrum)."[754] California argued in favor of implementing "a small incremental cost increase in a 'heavy use' area as a means of offsetting the cost for providing service to a 'low use' area."[755]

385. Some commenters argued that the Federal government should subsidize the public safety network. RPC 33 argues that the user fees should be "fair and equitable to all concerned" and that funding for the network should come from the Federal government until the D Block spectrum becomes profitable.[756] Wireless RERC supported capping fees that could be charged to public safety entities and contends the network costs could be subsidized using "funds appropriated by Congress, federal grants, or a cost-recovery fund."[757]

386. APCO indicated that "per unit and aggregate service pricing has been a major concern for APCO since the inception of this process."[758] Specifically, APCO argued that "it will almost always cost more to provide an equal level of service to the smaller agency that works in remote areas and have wide jurisdictional areas than it will to cover a dense urban area."[759] APCO suggested that the imbalance in equalizing rates between populated versus less populated areas could be addressed through such measures as "blanket Federal subsidies," "a rate structure that is subsidized by the other users," or for the Commission "to collect a user fee on all users, similar to a 911 service fund or fee."[760] In all cases,

[749] Televate Comments at 10.

[750] Televate Comments at 10.

[751] Eads Comments at 3.

[752] NTCH Comments at 6.

[753] NTCH Comments at 6.

[754] US Cellular Comments at 14, 22.

[755] California Comments at 5.

[756] RPC 33 Comments at 5.

[757] Wireless RERC Comments at 12-13.

[758] APCO Comments at 14.

[759] APCO Comments at 14.

[760] APCO Comments at 15.

however, APCO recommended that the Commission "take full advantage of an advisory rate board, commission or advisory group to assist in establishing the rates and future adjustments to them."[761] APCO also suggested that the Commission allow the "PSBL and the D Block licensee to negotiate with qualified public safety agencies to accept capital investments or the use of publicly funded capital investment in exchange for reduced rates."[762]

387. AT&T argued that the Commission "must promulgate guidelines that address the service fees commercial partners may charge local public safety users . . . ."[763] AT&T further argued that "[p]otential commercial partners require such clarification in order to evaluate the financial prospects of this venture" and that, therefore, if "the Commission intends to restrict the type or amount of service fees a commercial partner may charge a local public safety user, the Commission must clearly explain this restriction prior to an RFP process or a reauction."[764]

388. Discussion. Resolving the matter of service fees for public safety use of the broadband network requires us to carefully balance the interests of potential D Block bidders and public safety users of the network.[765] It is also important to provide both sets of stakeholders with a fee structure that is reasonably stable and predictable, notwithstanding the difficulty of determining such fees given the limited information before us.[766] We agree with commenters that potential commercial participants need sufficient pre-auction information regarding fees to help them evaluate the financial prospects of providing both a commercial- and public safety-oriented service.[767] Similarly, we believe that public safety agencies need specificity regarding prospective fees in order to ensure their timely commitment to use the public safety spectrum and to enable them to plan and budget for the use of the new network.

389. As an initial matter, with regard to those commenters who argue that the fees charged to public safety users of the shared network should be subsidized by the Federal government, whether on an ongoing basis or through the use of auction proceeds,[768] we note that we lack the authority to obligate Federal funds in such fashions. In addition, while we find Northrop Grumman's concept of a "no profit, no loss" or similar framework appealing,[769] we do not believe that we should prohibit the D Block licensee from deriving income from public safety users of the public safety spectrum. We agree with the general consensus of most commenters, however, that any fees charged to public safety users should be discounted as compared to the fees charged to commercial users.

390. We tentatively conclude, therefore, that we should establish fixed nationwide service fees that the D Block licensee may charge to public safety users based upon a discounted rate schedule. We believe that adopting a fee schedule nationwide will ensure uniform standards and practices in the 700

[761] APCO Comments at 15.

[762] APCO Comments at 16.

[763] AT&T Reply Comments at 20; *see also* Northrop Grumman Comments at 7-8; Peha Comments at 13; Wireless RERC Comments at 12-13.

[764] AT&T Reply Comments at 20. AT&T also recommended guidelines addressing spectrum usage fees, and asserted that, if "the Commission permits the PSBL to charge access fees, the Commission should ensure that such payments be negotiated . . . using commercial practices for cost recovery for the PSBL." *Id*.

[765] *See* AT&T Comments at 20. We also recognize Peha's argument that a failure to determine rates *ex ante* could adversely affect public safety purchase of 700 MHz equipment. *See* Peha Comments at 13.

[766] *See* Peha Comments at 13.

[767] *See*, *e.g.*, AT&T Comments at 20.

[768] *See* Eads Comments at 3.

[769] *See* Northrop Grumman Comments at 8.

MHz band, rapid adoption and deployment by public safety users, and provide an efficient cost structure for the D Block licensee(s) as it builds out a network capable of supporting commercial and public safety users.

391. As we consider the specific fees to be mandated, we tentatively conclude that the rates being offered today for broadband wireless data service provide a sufficient, forward-looking benchmark upon which to establish a nationwide fee schedule. We tentatively conclude that the characteristics of services, such as those offered by Verizon Wireless, AT&T Mobility, Sprint Nextel, and T-Mobile, are consistent with those that will be associated with the public safety broadband network. We also find that offering such discounted fixed rates is a standard practice of nationwide and regional wireless carriers that have established voice and data service prices for public safety and government users. We base our conclusion on a survey of contracts, as presented in Table 2, that are presently offered to governments and public safety authorities for wireless voice and data services.[770]

Table 2. Survey: Discounted Wireless Data Plans

Contracting Entity	Wireless Operator	Service Plan[771]	Monthly Service Charge
General Services Administration[772]	Verizon Wireless	VZAccess (NationalAccess/BroadbandAccess)	$48.59
Western States	Verizon	BroadbandAccess for Internet and E-	$49.19[774]

[770] *See, e.g.*, General Services Administration, Federal Supply Service, Cellular/PCS Services, Contract # GS-35F-0119P, available at https://www.gsaadvantage.gov/ref_text/GS35F0119P/0EA660.1OSTP9_GS-35F-0119P_GSAADVANTAGEMOD12GS35F0119P040408.PDF (last viewed on August 27, 2008); Western State Contracting Alliance, at http://www.aboutwsca.org/welcome.cfm (last viewed on August 27, 2008); State of New York, Office of General Services, Procurement Services Group, Contract Number PS61217, Group Number 77008 (effective August 15, 2007), available at http://www.ogs.state.ny.us/ purchase/prices/7700802459prices1207.pdf (last viewed on August 27, 2008).

[771] We note that some of these plans contain restrictions on the use of the wireless data network. For example, Verizon Wireless' contracts discussed herein stipulate its wireless data services may only be used for "(i) Internet browsing, (ii) e-mail, and (iii) intranet access (including access to corporate Intranets, e-mail and individual productivity applications like customer relationship management, sales force and field automation." Verizon Wireless specifically prohibits uses including the " (i) continuous uploading, downloading or streaming of audio or video programming or games, (ii) server devices or with host computer applications, other than applications required for enhanced phone applications, including but not limited to Web camera posts or broadcasts, automatic data feeds, automated machine-to-machine connections, or peer-to-peer file sharing, or (iii) as a substitute or backup for private lines or dedicated data connections." Similarly, Sprint Nextel's contract stipulates that "[s]ervices are not available for use in connection with server devices or host computer applications, other systems that drive continuous heavy traffic or data sessions." *See* State of New York, Office of General Services, Verizon Wireless Contract Number PS61217 (effective August 15, 2007), available at http://www.ogs.state.ny.us/purchase/prices/7700802459prices1207.pdf (last viewed on August 27, 2008) (*New York State Verizon Wireless Contract*); Sprint Nextel Contract Number PS60701 (effective July 15, 2007), available at http://www.ogs.state.ny.us/purchase/prices/7700802459prices1207.pdf (last viewed on August 27, 2008) (*New York State Sprint Nextel Contract*). *See also* General Services Administration, Federal Supply Service, Cellular/PCS Services, Contract # GS-35F-0119P, available at https://www.gsaadvantage.gov/ref_text/GS35F0119P/0EA660.1OSTP9_GS-35F-0119P_GSAADVANTAGEMOD12GS35F0119P040408.PDF (last viewed on August 27, 2008) (*GSA Verizon Wireless Contract*).

[772] *GSA Verizon Wireless Contract.*

Contracting Entity	Wireless Operator	Service Plan[771]	Monthly Service Charge
Contracting Alliance[773]	Wireless	mail	
	Sprint PCS	Sprint PCS Connection Card Unlimited Usage (applies to usage on both 1xRTT and EVDO networks)	$49.99
	T-Mobile[775]	T-Mobile Total Internet Unlimited Usage	$33.99[776]
		T-Mobile Total Internet for Data Cards Unlimited Usage	$42.49[777]
	AT&T Mobility[778]	Public Safety Unlimited Data	$49.99
State of New York[779]	Verizon Wireless	VZAccess (NationalAccess/BroadbandAccess)	$48.59
	Sprint Nextel	Unlimited Connection Plan EVDO DataLink	$59.99
		Unlimited Connection Plan 1xRTT DataLink	$59.99
State of Florida[780]	AT&T Mobility	Wireless Data Usage Plan Unlimited Usage	$43.99
	Sprint	Wireless Data Usage Plan	$44.99

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[773] The WSCA is comprised of state purchasing directors that negotiate purchasing contracts for goods and services. WSCA membership consists of the principal procurement official that heads the state central procurement organization, or designee for that state, from the states of Alaska, Arizona, California, Colorado, Hawaii, Idaho, Minnesota, Montana, Nevada, New Mexico, Oregon, South Dakota, Utah, Washington and Wyoming. In addition, the following states use WSCA contracts: Alabama, Arkansas, Florida, Georgia, Iowa, Illinois, Indiana, Kansas, Kentucky, Massachusetts, Maryland, Maine, Michigan, Missouri, Mississippi, North Carolina, Nebraska, New Hampshire, New York, Ohio, Oklahoma, Pennsylvania, Rhode Island, Tennessee, Texas, Wisconsin, and the District of Columbia.

[774] This amount reflects an 18% discount that Verizon Wireless extends to signatories of the WSCA contract. According to Verizon Wireless, the standard rate is $59.99. *See* Verizon Wireless, at https://b2b.verizonwireless.com/b2b/commerce/shop/viewPlanDetail.go?planId=48372 (last viewed on August 27, 2008).

[775] Under its contract with the WSCA, T-Mobile extends a 15% discount on recurring monthly charges. *See* WSCA, Contract for Services of Independent Contractor, T-Mobile USA, available at http://purchasing.state.nv.us/Wireless/T-Mobile_Contract.pdf (last viewed on August 27, 2008).

[776] This amount reflects a 15% discount off the $39.99 retail rate.

[777] This amount reflects a 15% discount off the $49.99 retail rate.

[778] *See* WSCA, Contract for Services of Independent Contractor, AT&T Mobility, available at http://purchasing.state.nv.us/Wireless/Cingular_BB.pdf (last viewed on August 27, 2008).

[779] *New York State Verizon Wireless Contract; New York State Sprint Nextel Contract*.

[780] State of Florida, Department of Management Services, MyFloridaSUNCOM Services, at http://dms.myflorida.com/cits/portfolio_of_services/suncom/wireless_services/wireless_data_services_aircard (last viewed August 27, 2008).

Contracting Entity	Wireless Operator	Service Plan[771]	Monthly Service Charge
		Unlimited Usage	
	Verizon Wireless	Wireless Data Usage Plan Unlimited Usage	$52.59

392. Generally, the service rates charged by these carriers apply nationwide, thus providing a useful model for establishing a nationwide, fixed rate schedule for public safety users of the shared wireless broadband network. Based on our survey, the average discounted service charge is approximately $48.50 per month, which thus may serve as an appropriate amount. In sum, we seek comment on our tentative conclusions that we should set a specific service fee for public safety users and that such fee be based on rates charged to government users of existing wireless voice and data services. We also seek comment on whether a rate of $48.50 per user per month as the base rate that will be charged to all public safety users is reasonable.

393. In developing a proposed base rate, we seek to achieve the best approximation of what a competitive, yet discounted rate should be for these services. We seek to ensure an initial stable service arrangement between the D Block licensee(s) and the public safety user community by establishing an initial flat rate for service based on appropriate considerations of commercial viability and the generally limited financial means of the public safety community. We believe this is an important consideration towards ensuring widespread adoption of advanced interoperable services by the public safety community. We recognize, however, that the factors that determine service rates are not static, and that over time marketplace forces will need to be taken into account in the adjustment of public safety service rates. Thus, we tentatively conclude that we will allow the fixed rates we ultimately adopt to sunset coterminous with the expiration of the fourth year build out requirement, at which point we expect the D Block licensee(s) will be providing service to a significant portion of the nation's public safety community. In the fifth year of operation, we expect that the commercial market for D Block spectrum and services will have sufficiently developed so that the General Services Administration likely will have developed a fee schedule for government users of the commercial spectrum. At that time, we propose to use that schedule as the basis for adjusting public safety fees for use of the network. We seek comment on this proposal.

c. Other Essential Components

394. Background. In the *Second Report and Order*, we established certain minimum criteria that the Public Safety Broadband Licensee must meet in order to ensure that it "focuses exclusively on the needs of public safety entities that stand to benefit from the interoperable broadband network."[781] In particular, we established certain criteria for the Public Safety Broadband Licensee eligibility, including a requirement that the Public Safety Broadband Licensee must be broadly representative of the public safety community.[782] We also required that the Public Safety Broadband Licensee be governed by a voting board consisting of eleven members, one each from the nine organizations representative of public safety, and two at-large members selected by the Public Safety and Homeland Security Bureau and the Wireless Telecommunications Bureau, jointly on delegated authority.[783] On reconsideration, we revised

[781] *Second Report and Order*, 22 FCC Rcd at 15421-22 ¶ 373.

[782] *Second Report and Order*, 22 FCC Rcd at 15421-25 ¶¶ 373-375.

[783] The nine organizations included: the Association of Public Safety Communications Officials (APCO); the National Emergency Number Association (NENA); the International Association of Chiefs of Police (IACP); the International Association of Fire Chiefs (IAFC); the National Sheriffs' Association (NSA); the International City/County Management Association (ICMA); the National Governor's Association (NGA); the National Public (continued….)

and expanded the voting board, and increased the at-large membership to four.[784]

395. We also required that certain procedural safeguards be incorporated into the articles of incorporation and bylaws of the Public Safety Broadband Licensee.[785] For example, we specified that the term of the Public Safety Broadband Licensee officers would be two years, and that election would be by a two-thirds majority vote.[786] A two-thirds majority was also required for certain other Public Safety Broadband Licensee decisions, including amending the articles of incorporation or bylaws.[787] We also recognized the importance of Commission oversight in the affairs of the Public Safety Broadband Licensee, which we enabled by requiring the Public Safety Broadband Licensee to submit certain reports to the Commission, including quarterly financial disclosures.[788]

396. In the *Second Further Notice*, we sought to reexamine the structure of the Public Safety Broadband Licensee and the criteria adopted in the *Second Report and Order* to ensure they are optimal for establishing and sustaining a partnership with a commercial entity, and for efficiently and equitably conducting the business of the Public Safety Broadband Licensee. As developed more fully below, we sought comment on whether we should reevaluate any of these criteria, whether we should clarify or increase the Commission's oversight of the Public Safety Broadband Licensee, and whether we should make other changes to the license or license eligibility criteria.[789] We further sought comment on how the Commission can ensure an oversight role for Congress; whether State governments should assume responsibility for coordinating the participation of the public safety providers in their jurisdictions; and whether, in light of possible changes to the eligibility and other criteria that govern the Public Safety Broadband Licensee, we should rescind the current 700 MHz Public Safety Broadband License and seek new applicants.[790]

(i) Articles of Incorporation and By-laws

397. Background. With respect to the articles of incorporation and bylaws that govern the Public Safety Broadband Licensee, we sought comment on the adequacy of the current requirements.[791] We sought comment, for example, on whether we should require a unanimous or super-majority vote in certain instances, whether we should provide for Commission review of such decisions, and whether the

(Continued from previous page)
Safety Telecommunications Council (NPSTC); and the National Association of State Emergency Medical Services Officials (NASEMSO). *Second Report and Order*, 22 FCC Rcd at 15422-23 ¶ 374.

[784] On reconsideration, we removed NPSTC and included the Forestry Conservation Communications Association (FCCA), the American Association of State Highway and Transportation Officials (AASHTO), and the International Municipal Signal Association (IMSA), and added two additional at-large positions. Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 96-86, *Order on Reconsideration*, 22 FCC Rcd 19935 (2007) (*Order on Reconsideration*). The Chiefs of the Public Safety and Homeland Security Bureau and Wireless Telecommunications Bureau jointly appointed to the voting board the American Hospital Association (AHA), the National Fraternal Order of Police (NFOP), the National Association of State 9-1-1 Administrators (NASNA), and the National Emergency Management Association (NEMA). *See* "Public Safety and Homeland Security Bureau and Wireless Telecommunications Bureau Announce the Four At-Large Members of the Public Safety Broadband Licensee's Board of Directors," *Public Notice*, 22 FCC Rcd 19475 (PSHSB 2007).

[785] *Second Report and Order*, 22 FCC Rcd at 15423-26 ¶ 375.

[786] *Second Report and Order*, 22 FCC Rcd at 15423-26 ¶ 375.

[787] *Second Report and Order*, 22 FCC Rcd at 15423-26 ¶ 375.

[788] *Second Report and Order*, 22 FCC Rcd at 15426 ¶¶ 376-77.

[789] *Second Further Notice,* 23 FCC Rcd at 8067 ¶ 48.

[790] *Second Further Notice,* 23 FCC Rcd at 8067 ¶ 48.

[791] *Second Further Notic,e* 23 FCC Rcd at 8067 ¶ 49.

Commission should make certain decisions for the Public Safety Broadband Licensee if unanimity or supermajority is not achieved.[792] With respect to the voting board, we sought comment on the composition, size and qualifications of the board.[793] We also sought comment on whether we should eliminate altogether the requirement of inclusion of specific voting board members, and if so, how we could ensure broad representation of the public safety community.[794] With respect to the leadership of the board, we asked whether we should revise the terms of the officers; whether we should require a unanimous vote for appointment of officers; whether we should require a rotating chairmanship among the voting board members; and whether the Commission should appoint a chairperson in the event that unanimous consent cannot be attained on appointing such person.[795]

398. Comments. There were a number of comments addressing the composition of the PSBL board of directors and board transparency and voting matters.

399. *Board Composition*. For its part, the PSST indicated that it "opposes any change in the composition of its Board, including the possibility of including representatives from a variety of non-public safety entities."[796] In this regard, the PSST asserted that "the PSST is structured in strict compliance with all applicable FCC requirements,"[797] and, as currently constituted, "collectively represents virtually every type of public safety and governmental entity that is eligible to operate on the SWBN pursuant to the PSBL license and their interests have been well-represented in the Board's highly collaborative decision making processes."[798] Rather than revise its organizational make-up, the PSST argued that the Commission should "instead work with the organizations represented on the current PSST Board to address any major concerns about the organizational structure and governance of the organization."[799] The PSST further indicated that the Commission should not prohibit the PSST Chairman of the Board of Directors from also serving as Chief Executive Officer in favor of creating a separate position of President/CEO to manage the PSST's business "unless the Commission has some definite funding mechanism for the PSST/PSBL to pay for such a position."[800]

400. IACP argued that the present PSBL board "represents not only the myriad of agencies, but those who finance, operate and manage public safety systems."[801] IACP further asserted that reducing "the number of the Board" would "dilute" the link between the Board and public safety.[802] IACP also asserted that any expertise needed in telecommunications, finance and/or management can be obtained through the retention of experts.[803] AASHTO asserted that adding any more PSBL board members "could create a body so unwieldy it is unable to react to the ever changing needs of its users in a timely

[792] *Second Further Notice,* 23 FCC Rcd at 8067 ¶ 49.

[793] *Second Further Notice,* 23 FCC Rcd at 8067 ¶ 50.

[794] *Second Further Notice,* 23 FCC Rcd at 8067 ¶ 50.

[795] *Second Further Notice,* 23 FCC Rcd at 8067 ¶ 50.

[796] PSST Reply Comments at 17. *See also* PSST Comments at 47.

[797] PSST Comments at 45.

[798] PSST Comments at 45-46.

[799] PSST Comments at 47.

[800] PSST Comments at 46.

[801] IACP Reply Comments at 3.

[802] IACP Reply Comments at 3.

[803] IACP Reply Comments at 3.

manner."[804] Ericsson advises that changing the PSBL board composition "at this time could impose additional delay … and create a new source of uncertainty."[805] Other commenters similarly urged the Commission not to reassess the composition or size of the Public Safety Broadband Licensee's board.[806]

401. A number of commenters, however, proposed various changes to the Public Safety Broadband Licensee's governance structure. APCO, for example, suggested various modifications regarding membership in the Public Safety Broadband Licensee. First, APCO asked the Commission to "clarify that the organizations it names [to the board] must be the actual members of the PSBL board to the extent that this can be done without creating undue financial liability to the respective organizations."[807] Second, APCO contended that "the large size of the PSST board has led to over-reliance on the Chairman/CEO and a three-person executive committee (the chairman, vice-chairman, and secretary/treasurer)," and proposed that a "smaller board would allow for a more inclusive decision-making."[808] Third, APCO argued that the PSBL board "does not provide sufficient diversity of interests or required expertise to undertake the extraordinary tasks at hand," such as "designing or operating public safety communications systems" and in the fields of "business, finance, [and] communications technology."[809] According to APCO, such lack of experience on the board lead the PSST "to rely even more heavily on the advice of its agent/advisor and limits its ability to engage in a thorough critique of that advice."[810] APCO suggested that the Commission change the composition of the PSBL board to "a board of eight to twelve members, with approximately half of the members being diverse organizations that represent potential users of the network and those with expertise in public safety communications matters" and the other half composed of "individuals selected by the Commission who do not represent any particular organization but who would add critical knowledge and expertise to the PSBL's decision making."[811] APCO further recommended that the "position of the Chairman of the board of directors" should be separated "from the position of CEO/President" because of the very different responsibilities of the two positions."[812] APCO, however, did "not support term limits or mandatory rotation of the chairmanship."[813]

402. Region 33 suggested that PSBL board membership be "limited to no more than nine members, jointly selected and approved by both the FCC's PS&HSB and the LMCC."[814] Region 33 indicated that board membership should be composed "entirely from the not-for-profit public safety community," although "ex-officio members could be from the private sector to serve [in a] technical

[804] AASHTO Comments at 11. In this context, AASHTO advises against adding a Commission or Congressional representative to the Board. *Id*.

[805] Ericsson Comments at 8.

[806] *See*, *e.g.*, IMSA Comments at 11; IMSA Reply Comments at 7-8; ICMA Reply Comments at 2; NPSTC Reply Comments at 7.

[807] APCO Comments at 22.

[808] APCO Comments at 22.

[809] APCO Comments at 22.

[810] APCO Comments at 22.

[811] APCO Comments at 24. NENA agreed with APCO's recommendations on widening the relevant experience of Board members. *See* NENA Comments at 4.

[812] APCO Comments at 21.

[813] APCO Comments at 21.

[814] RPC 33 Comments at 7.

advisory role but [would] not vot[e] on the governing issues."[815]

403. NATOA indicated concern "that local governments are not adequately represented by the current makeup of the [PSST]."[816] NATOA observed that "local services, systems, property, and personnel will be directly affected by the construction of a nationwide public safety broadband network," and argued that "the exclusion of such representation deprives the PSBL of the insights and experience of elected local government officials that represent the entities the PSBL is charged to serve."[817] Other commenters supported this view.[818]

404. NRPC requested that the Commission name it as "a full voting member organization on the Public Safety Broadband Licensee."[819] In this regard, NRPC indicated that it could provide "a perspective on the 700 MHz narrowband reallocation issue and transition as well as the necessary coordination aspects," and could "contribute to the effectiveness and coordinated use of the 1 MHz Guard Band between 768-769-798-799 MHz."[820]

405. *Board Transparency and Voting*. The PSST stated that "for the most part, conducting open meetings is a good idea to facilitate its efforts to work cooperatively with members of the public safety community, as well as with vendors, commercial operators, and other parties, and believes that appropriate changes in its procedures should be evaluated by the Board."[821] APCO urged "that the FCC require the PSBL board meetings be held in public, with the proviso that the board may go into executive session to address sensitive matters," but with "minutes … describ[ing] the matters addressed in executive session to the extent possible without revealing sensitive information."[822] Peha similarly stated that "one essential requirement [of the PSBL] is transparency," and that "requirements related to transparency should be added to the list [of requirements to become the [PSBL]," and that the "current [PSBL], the PSST, would not meet such requirements, and would therefore be ineligible."[823] Other commenters expressed similar views.[824] AASHTO, however, argued that "[a]s a private entity the PSST is not required to make its meetings open to the general public."[825]

406. With respect to voting issues, the PSST and other commenters opposed the adoption of any unanimous voting requirement for the Public Safety Broadband Licensee board decisions on the basis that such a requirement could lead to stalemates and dilute leadership accountability.[826] NPSTC observed that "[u]nanimous [voting] rules [ ] place in the hands of one or a few the ability to thwart the best ideas

[815] RPC 33 Comments at 7. *See also* Lencioni Comments at 2 (the PSBL should "be a[s] broadly representative of the public safety radio user community as possible").

[816] NATOA *et al.* Comments at 15.

[817] NATOA *et al.* Comments at 16.

[818] *See* Philadelphia Comments at 4. Philadelphia expressly endorses "the proposal by NATOA" in this regard. *Id*. *See, also* Philadelphia Reply Comments at 2; Florida Comments at 4.

[819] NRPC Comments at 6.

[820] NRPC Comments at 6.

[821] PSST Reply Comments at 16.

[822] APCO Comments at 21.

[823] Peha Comments at 9.

[824] *See*, *e.g.*, RPC 20 Reply Comments at 11; NATOA *et al.* Reply Comments at 7.

[825] AASHTO Reply Comments at 5.

[826] *See* PSST Comments at 46; NPSTC Comments at 22; APCO Comments at 21.

and initiatives."[827] Both the PSST and APCO, however, supported super-majority voting on certain matters, including election of officers.[828] The IMSA urged the Commission not to "micromanage the affairs of the PSST by adopting additional rules on voting majorities."[829]

407. Discussion. We agree with commenters who advocate revising the Public Safety Broadband Licensee's organizational structure to enhance the Public Safety Broadband Licensee's operational efficiency and transparency. In light of the unique representative nature of the license, which the Public Safety Broadband Licensee holds on behalf of those public safety entities eligible to utilize this spectrum, the public interest favors any changes to the Public Safety Broadband Licensee's organizational structure that will better ensure that its actions reflect due consideration of the broad panoply of public safety interests it represents. We also consider it important to hold the PSBL to a standard of transparency that will ensure that its obligations are met in a manner that instills public confidence in both the process and the outcome of its actions. We believe improvements in these areas can be achieved with a few modifications to the Public Safety Broadband Licensee's current organizational structure, along with other modifications we are proposing with respect to the Public Safety Broadband Licensee's Board's meeting and voting requirements.

408. *Board Composition*. We tentatively conclude that we will retain the current PSBL board composition, except that we propose to replace the National Emergency Management Association (NEMA)[830] on the board with the National Regional Planning Council (NRPC). We propose to remove NEMA as a representative organization on the board because its initially appointed representative has consistently failed to attend board meetings and the organization has not otherwise materially participated in PSBL board activities. Because NEMA has not meaningfully participated as a member organization of the PSBL, we tentatively conclude that it no longer would serve the public interest to include NEMA as a PSBL board member.

409. We propose adding NRPC as a replacement board member for a number of reasons. The NRPC is a national organization drawn from the FCC-authorized Regional Planning Committees (RPCs), whose affiliation is linked to the states and U.S. Territories. The NRPC's mission is to serve public safety communications users through planning and management to meet their spectrum needs.[831] As we observed in the *Second Further Notice*, and consistent with our tentative conclusions herein, we anticipate that some of the PSBL's roles and responsibilities will be akin to the functions presently performed by the 700 MHz RPCs.[832] Thus, the NRPC would bring important and relevant experience to the PSBL board by virtue of its role in assisting regions with coordinating 700 MHz public safety spectrum use. We also agree with the NRPC's comments on its own behalf that its addition to the board would prove valuable to the PSBL in terms of the narrowband relocation process, and concerning coordination between the use of the public safety broadband spectrum and the guard band and narrowband allocations.[833] We seek comment on these tentative conclusions.

410. On a related matter, as noted above, APCO requests that we clarify that the organizations

[827] NPSTC Comments at 22.

[828] PSST Comments at 46; APCO Comments at 21.

[829] IMSA Comments at 11.

[830] NEMA is composed of state directors of emergency management, and is dedicated to enhancing public safety by improving the nation's ability to prepare for, respond to and recover from all emergencies, disasters, and threats to our nation's security. *See* http://www.nemaweb.org.

[831] *See* National Regional Planning Council at http://www.nrpc.us/index.jsp.

[832] *Second Further Notice*, 22 FCC Rcd at 8091 ¶ 122.

[833] *See* NRPC Comments at 6.

we name as PSBL board members "must be the actual members of the PSBL board" in order to avoid "discourag[ing] organizational input into matters being voted upon by the PSST Board."[834] One of the core eligibility requirements of the PSBL is that it be as representative of the public safety community as possible.[835] The member organizations were selected in part based on their representation of various sectors of the public safety community. While some member organizations may choose to delegate all decision-making authority to their PSBL representatives on the board, others may prefer that their representatives seek internal approvals so that the member organization can assure that the positions taken by its board representative are reflective of the organization's core membership. Accordingly, we tentatively conclude that representatives of member organizations, in their service on the PSBL board, should be permitted reasonable accommodation to seek approval of their respective organization's leadership. At the same time, we would expect the PSST to provide sufficient advance notice of issues to be decided so that board members can obtain any organizational approvals ahead of time, without causing undue delay to board actions. We seek comment accordingly.

411. *Chief Executive Officer*. We agree with APCO that the position of Chairman of the PSBL board of directors should be separated from the position of Chief Executive Officer (CEO) because of the very different responsibilities of the two positions. The Chairman primarily has management responsibilities, while the CEO primarily has charge of day-to-day operations. Separating these positions would allow for a discrete focus on two very different responsibilities, and thus increased efficiency. Accordingly, we tentatively conclude that the Public Safety Broadband Licensee's positions of Chairman of the Board and Chief Executive Officer must be filled by separate individuals. Our proposal would require that the PSST implement such separation within 30 days of adoption of an Order issuing final rules in this proceeding. Further, we propose that the PSST may not hire a new individual to fill the CEO position until the D Block licensee(s) has made funding available for the PSBL's administrative and operational costs. In recognition of the separate functions of these roles, we also propose that any individual appointed as CEO cannot have served on the PSBL executive committee during the period three years prior to his or her appointment as CEO. In this regard, we propose that the Public Safety Broadband Licensee's bylaws be amended to include the following provision: "Duties of Chief Executive Officer. The CEO shall have responsibility for the general supervision and direction of the business and affairs of the Public Safety Broadband Licensee, subject to the control of the Board, and shall report directly to the Board. No CEO shall have served on the Public Safety Broadband Licensee's Executive Committee for a period of 3 years prior to appointment."

412. *Officers*. We also agree with APCO that some action should be taken to redress what APCO describes as a previous "over-reliance on the [PSST's] Chairman/CEO and a three-person executive committee (the chairman, vice-chairman, and secretary/treasurer)," which APCO describes as having exercised "a substantial degree of discretion without sufficient opportunities for input from other board members."[836] We do not agree with APCO, however, that any such "over-reliance" need be resolved by reducing the size of the PSBL board of directors.[837] The current members of the board were appointed with due consideration, and with particular attention to the need to establish a board that is broadly representative of the public safety community.[838] We believe that any reduction in the number of

[834] APCO Comments at 22.

[835] *See* 47 C.F.R. § 90.523(e)(3).

[836] APCO Comments at 22.

[837] *See* APCO Comments at 22.

[838] *See Second Report and Order,* 22 FCC Rcd at 15422 ¶ 374; *Order on Reconsideration*, 22 FCC Rcd at ¶ 4; Public Safety and Homeland Security Bureau and Wireless Telecommunications Bureau Announce the Four At-Large Members of the Public Safety Broadband Licensee's Board of Directors, *Public Notice*, 22 FCC Rcd 19475 (PSHSB 2007).

board members would diminish this important objective. Instead, we tentatively conclude that the executive committee should be reformed. Accordingly, we propose to require the PSST board to elect a new executive committee – *i.e.*, the PSST must elect a new Chairman, Vice-Chairman, and Secretary/Treasurer within 30 days of adoption of an Order issuing final rules in this proceeding. We propose that these executive committee members: (i) must be limited to a term of 2 years; and (ii) may not serve consecutive terms in the same position. We further propose that no current executive committee member may be re-elected to the same position on the committee.[839] We also propose to prohibit the PSBL from expanding its executive committee beyond these three offices. We seek comment on these proposals.

413. *Supermajority Voting*. We tentatively conclude that we will require three-fourths supermajority voting on all major decisions by the PSBL board of directors. Specifically, for selection of the CEO and election of officers, we propose to require a three-fourths vote of board members present at the board meeting. We also propose to require a three-fourths vote of all board members (not limited to those present at the board meeting) for changes in the articles or bylaws, approval of any contract of a cumulative value exceeding $25,000 per year, and approval of any expenditure exceeding $25,000 per item. Both the PSST and APCO supported supermajority voting for certain decisions.[840] We believe that requiring a three-fourths vote, instead of the two-thirds majority vote currently required for most major PSBL board decisions, will further ensure that the PSBL will only undertake major actions that have the broad support of the PSBL's representative constituents.

414. *Public Board Meetings*. We observe that both the PSST itself as well as public safety interests support the opening of PSBL board meetings to the public.[841] We thus tentatively conclude that we will require PSBL board meetings to be open to the public, except that the board will have a right to meet in closed session to discuss sensitive matters.[842] Further, we propose that the PSBL must make the minutes of each board meeting publicly available, including portions of meetings held in closed session, but that the published minutes of closed sessions may be redacted. We further propose that the PSBL must provide the public with no less than 30 days advance notice of meetings. Relatedly, we tentatively propose to require that the PSBL present its annual, independently audited financial report (which is a new financial reporting obligation we are proposing elsewhere in this Third Further Notice) in an open meeting. We expect that all of these measures will improve the efficiency and transparency of the PSBL's actions, and seek comment accordingly.

(ii) Commission and/or Congressional Oversight

415. Background. With respect to enhancing oversight of the 700 MHz Public/Private Partnership, in the *Second Further Notice* we sought comment on how the Commission can better exercise oversight over the activities of both the Public Safety Broadband Licensee and its commercial partner. We asked, for example, whether quarterly financial reporting is adequate, or whether additional disclosures by the Public Safety Broadband Licensee or commercial partner would be necessary.[843] We also asked what additional measures, if any, the Commission should take to ensure the appropriate level

[839] Current executive committee members may be elected to positions on the committee other than the ones they currently hold.

[840] See PSST Comments at 46; APCO Comments at 21.

[841] *See* PSST Reply Comments at 16; APCO Comments at 21; NATOA *et al.* Reply Comments at 7.

[842] Sensitive matters warranting closed board meetings would include, for example, matters involving proprietary or confidential information provided by vendors or outside parties for the board's consideration, and matters involving public safety or homeland security not normally made public.

[843] *See Second Further Notice*, 23 FCC Rcd at 8068 ¶ 51.

of oversight.[844] We asked, for example, whether we should require Commission approval of certain Public Safety Broadband Licensee activities, such as requiring Commission approval before the Public Safety Broadband Licensee could enter into contracts of a particular duration or cumulative dollar amount.[845] We further asked whether we should require or reserve the right to have Commission staff attend meetings of the voting board.[846] In addition to enhancing Commission oversight of the 700 MHz Public/Private Partnership, we also sought comment on how the Commission can ensure an oversight role for Congress, both in the operations of the Public Safety Broadband Licensee and the 700 MHz Public/Private Partnership.[847] We asked, for example, whether Congress should designate some of the Public Safety Broadband Licensee's board members.[848]

416. Comments. The PSST opposed "requiring [it] to obtain prior FCC approval for certain decisions" because this "would cause delays that could undermine the PSST's ability to carry out its duties."[849] The PSST observed that it is already required to submit quarterly financial reporting to the Commission, and to "the extent that the Commission believes that additional oversight is necessary, the PSST can provide additional reports to the FCC on its operational goals and actions."[850] The PSST stated that a "monthly discussion, or more often if needed, with the appropriate persons at the FCC would be [an] effective means to provide the PSST with guidance and interpretation of FCC intent … particularly in the early years of its operation."[851] The PSST did, however, support a Commission official serving in an *ex officio* capacity on the PSBL board, and recommended that a Commissioner serve in that role.[852]

417. APCO, however, argued that "the formal relationship between the Commission and the PSBL must be strengthened."[853] Accordingly, APCO indicated support for "Commission oversight, quarterly financial reports, and periodic audits to ensure that the PSBL is operating in conformance with its public responsibilities and Commission rules," as well as having "its records be open for public inspection."[854] APCO also indicated support for "a Commission official serving in an *ex officio* capacity on the PSBL board."[855] Most other comments addressing the issue of Commission oversight of the PSBL's activities agreed that such oversight is necessary and important.[856] AASHTO, however, warned that "[i]ncreasing the reporting activities of the PSBL will have a significant impact as the cost of

[844] *See Second Further Notice*, 23 FCC Rcd at 8068 ¶ 51.

[845] *See Second Further Notice*, 23 FCC Rcd at 8068 ¶ 51.

[846] *See Second Further Notice*, 23 FCC Rcd at 8068 ¶ 51.

[847] *See Second Further Notice*, 23 FCC Rcd at 8066 ¶ 48.

[848] *See Second Further Notice*, 23 FCC Rcd at 8066 ¶ 48.

[849] PSST Comments at 46.

[850] PSST Comments at 47.

[851] PSST Comments at 48.

[852] PSST Comments at 48.

[853] APCO Comments at 20.

[854] APCO Comments at 19.

[855] APCO Comments at 20, 24.

[856] *See* NPSTC Comments at 22 (Commission's "oversight should be directed to ensure the PSBL's process results in the handling of relevant issues, the opportunity for debate, and the generation of sound and fair decisions"); Region 20 Reply Comments at 12 ("[a]t a minimum, the books and records of the PSST Board should be always available to the Commission's Office of Inspector General"); Televate Comments at 5 (in the context of its revised plan for implementing a shared broadband network, proposes "appropriate FCC oversight" for the PSST's evaluation of "all proposals from bidders"); Ericsson Comments at 7; Peha Comments at 11.

providing reports and documentation would have to be recovered in additional fees paid by the network user."[857]

418. With respect to Congressional oversight, the PSST stated that it "would welcome Congressional monitoring" but noted that the need for rapid decision-making "will of necessity limit the types of Congressional oversight that could be mandated."[858] Region 20 indicated reluctance to mandated Congressional oversight, however, noting that "[t]he current provisions of the [*Second Report and Order*] allow for certain "at-large" appointments and if the PSST Board determines that Congressional participation is in the best interests of public safety communications, the Board should be free to reach out to members of the Congress as "at large" participants."[859]

419. Discussion. Given the proposed enhancements to the structure and functioning of the PSBL discussed elsewhere in this Third Further Notice, we believe that we have addressed the principal concerns regarding oversight of the PSBL. In addition to affirming and enhancing the PSBL's reporting requirements, we are also proposing to require the submission of the PSBL's proposed annual budget to the Commission for review and approval. In this manner, the expected activities and operations of the PSBL can be monitored to ensure the PSBL is staying within its role as representative of the public safety community. Part and parcel with those reporting requirements, we are proposing to require the PSBL to establish an audited annual budgeting process, conducted by an external, independent auditor, which will enhance the ability to oversee the activities and operations of the PSBL. Further, as discussed elsewhere in this Third Further Notice, we have narrowed and clarified the mission and responsibilities of the PSBL. With respect to Congressional oversight, Congress maintains an oversight role over our decisions and thus we see no need for any extraordinary provisions that would presume to compel Congress into an oversight role it has not already defined for itself.

(iii) Role of State Governments

420. We also sought comment in the *Second Further Notice* on whether providing a nationwide, interoperable broadband network might be more effectively and efficiently accomplished by allowing state governments (or other entities that have or plan interoperable networks for the benefit of public safety) to assume responsibility for coordinating the participation of the public safety providers in their jurisdictions.[860] To that end, we asked parties supporting such action to comment on the proper relationship between the state governments and the Public Safety Broadband Licensee and on our authority to establish such a role for state governments.[861] We asked, for example, whether the Public Safety Broadband Licensee should be authorized to choose a minimum standard for any public safety broadband operation, with the state governments given the responsibility to work with public safety providers to implement operations in their jurisdictions.[862] We further asked whether such an approach would allow state governments wanting higher-grade networks to implement separately these more-advanced systems, while allowing those wanting networks at the minimum standard to avoid what they may consider unnecessary expenses.[863] We also asked whether state governments are better situated to address implementation challenges that cross public safety jurisdictions (*e.g.*, coordinating use by sheriffs departments in neighboring counties) as well as intra-jurisdictional challenges (*e.g.*, coordinating use by

[857] AASHTO Comments at 11.

[858] PSST Comments at 49.

[859] RPC 20 Reply Comments at 11-12. *See also* RPC 33 Comments at 7.

[860] *Second Further Notice*, 23 FCC Rcd at 8068 ¶ 52.

[861] *Second Further Notice*, 23 FCC Rcd at 8068 ¶ 52.

[862] *Second Further Notice*, 23 FCC Rcd at 8068 ¶ 52.

[863] *Second Further Notice*, 23 FCC Rcd at 8068 ¶ 52.

the police versus fire departments), or whether, in the event different jurisdictions chose different grades of networks, there would be a resulting lack of economies of scale and thus higher equipment costs for all public safety users.[864]

421. Comments. Commenters expressed mixed views on the issue of allowing states to coordinate the participation in the shared network by the public safety providers in their jurisdictions. ASSHTO, for example, suggested that while there might be benefits in having "[s]tate governments [ ] assume responsibility for coordinating the participation of the public safety providers in their jurisdictions," the "networks operated by states for users other than state agencies is voluntary and cannot be impelled."[865] Similarly, NRPC asserted that "[s]tates should be utilized in the development of a nationwide public safety broadband network to the degree each state wants to assist and utilize its resources."[866] NRPC, however, also emphasized that the Commission should "NOT impose any mandates on states to facilitate, administer or promote any element associated with a nationwide public safety broadband network."[867]

422. A number of commenters argued, however, that state and local participation in the development and management of the network would be essential. Region 33 stated that "any 'system' without local oversight would be unmanageable."[868] Wireless RERC suggested that State Emergency Communications Committees and Local Emergency Communications Committees should offer guidance in the "development of any strategic public safety migration plan."[869] Rivada asserted that "[b]efore the Commission can responsibly move forward with a revised public/private partnership (or any other resolution of the D-Block and adjacent public safety spectrum) the interests of various public safety agencies at the State, local and Federal level will all need to be surveyed and resolved."[870]

423. Discussion. While we appreciate the relationships that the states have with the public safety providers in their jurisdictions, we do not believe it would be efficient or beneficial to carve out a specific role for the states in coordinating their public safety providers' participation in the interoperable shared broadband network. We expect the Public Safety Broadband Licensee to work with all public safety interests, whether at local, Tribal, state or regional levels, to ensure that usage of the interoperable shared broadband network.is coordinated to meet the needs of all eligible public safety users in the most efficient manner. Further, we observe that participation on the Public Safety Broadband Licensee's Board by the National Governors Association already serves as a vehicle to ensure that states have direct input in the Public Safety Broadband Licensee's activities.

(iv) Reissuance of the Public Safety Broadband License and Selection Process

424. Finally, in light of the potential changes contemplated in the *Second Further Notice*, and the corresponding changes contemplated with respect to the D Block, we sought comment on whether we

[864] *Second Further Notice*, 23 FCC Rcd at 8068 ¶ 52.

[865] AASHTO Comments at 11. *See also* NPSTC Comments at 22 ("[the] proposal to place in state governments the operating and policy responsibilities now committed to the PSBL lacks any credible indication that it will work."); California Comments at 2 (California, "no organization or entity has the legislated authority or funding necessary to assume the statewide responsibility" for coordinating the participation of public safety providers in facilitating the interoperable network in its jurisdiction.).

[866] NRPC Comments at 9.

[867] NRPC Comments at 9.

[868] RPC 33 Comments at 8.

[869] Wireless RERC Comments at 6.

[870] Rivada Reply Comments at 4.

should rescind the current 700 MHz Public Safety Broadband License and seek new applicants.[871] In the event such action is warranted, we asked whether we should use the same procedures as before, *i.e.,* delegating authority to the Chief, Public Safety and Homeland Security Bureau to solicit applications, specifying any changed criteria that may be adopted following this Third Further Notice, and having the Commission select the licensee.[872] We further asked whether there are other considerations that should be taken into account in selecting the licensee.[873] In addition, in light of the need to identify the licensee quickly to enable the effective development of the 700 MHz Public/Private Partnership, we sought comment as to the mechanism the Commission should employ to assign the Public Safety Broadband License in the event that there was more than one qualified applicant.[874]

425. Comments. With respect to the issue of rescinding the current PSBL license and opening a new application round, the PSST asserted that "the Commission should reject any suggestion [to rescind its license] and instead work with the organizations represented on the current PSST Board to address any major concerns about the organizational structure and governance of the organization rather than starting from scratch."[875] The PSST also contended that "it is our strong belief that the cost and delay in starting up another nonprofit, tax-exempt organization will result in irreparable damage to the substantial efforts of the public safety community to establish a new Public/Private Partnership and SWBN and creates a substantial risk that the entire effort to establish a new SWBN will fail."[876] The PSST noted that "there were no other applicants during the initial window."[877] The PSST further argued that "potential bidders on the D Block may be discouraged by the uncertainty that would be added to the process if interested parties have no idea who will be representing public safety interests going forward other applicants."[878] Finally, the PSST argued that "the PSST and its individual Board members have already contributed enormous efforts to the establishment of the PSST and its related infrastructure [] and it would be wasteful to walk away from this substantial investment when funding and resources are so scarce."[879] Other commenters also urged the Commission to reject proposals that advocate rescinding the Public Safety Spectrum Trust's license.[880] APCO, however, asserted that, in order to implement its suggested modifications to the PSBL's structure, APCO is comfortable with either modification of the PSST's articles and bylaws, or rescission of "the PSST's license" and selection of "a new PSBL."[881]

426. Discussion. As a threshold matter, we tentatively conclude that the public safety broadband spectrum should continue to be licensed on a nationwide basis to a single Public Safety Broadband Licensee. However, we seek comment on whether we should license the public safety broadband spectrum on a regional basis rather than a nationwide basis. Further, if we were to license the

[871] *Second Further Notice*, 23 FCC Rcd at 8068 ¶ 53.

[872] *Second Further Notice*, 23 FCC Rcd at 8068 ¶ 53.

[873] *Second Further Notice*, 23 FCC Rcd at 8068 ¶ 53.

[874] *Second Further Notice*, 23 FCC Rcd at 8068 ¶ 53.

[875] PSST Comments at 47. *See also* PSST Reply Comments at 16.

[876] PSST Reply Comments at 16.

[877] PSST Reply Comments at 16.

[878] PSST Reply Comments at 16.

[879] PSST Reply Comments at at 47-48.

[880] *See*, *e.g.*, ComCentric Comments at 3; WFCA Comments at 1; Oregon Comments at 1; IMSA Comments at 11; NAEMT Comments at 3; NPSTC Reply Comments at 6; NASEMSO Reply Comments at 2; Nextwave Reply Comments at 5; RPC 20 Reply Comments at 11; ICMA Reply Comments at 2.

[881] APCO Comments at 24-25.

public safety broadband spectrum on a regional basis, we seek comment on the procedures and selection criteria for assigning such licenses, and how multiple public safety broadband licensees would be able to ensure a nationwide level of interoperability and otherwise satisfy the roles and responsibilities of the public safety broadband licensee we discuss elsewhere. Assuming that we adopt our tentative conclusion to retain the nationwide Public Safety Broadband Licensee, we also tentatively conclude that is unnecessary to rescind the PSST's license and reissue the license to a new licensee in order to implement the foregoing changes to the PSBL. Pursuant to section 316(a)(1) of the Act, we have the authority to modify "[a]ny station license … if in the judgment of the Commission such action will promote the public interest, convenience, and necessity, or the provision of this Act."[882] For all of the reasons set forth in the preceding discussion, it is our judgment that the tentative changes that we propose to the PSBL will promote the public interest, convenience, and necessity, as well as the provisions of the Act. Accordingly, except as otherwise noted above, we expect the PSST to implement the tentative proposals specific to its structure and internal procedures that we have set forth in this Third Further Notice, within 90 days of publication of the relevant final rules in the Federal Register.

3. Narrowband Relocation

427. Background. In designating the lower half of the 700 MHz Public Safety band (763-768/793-798 MHz) for broadband communications, the *Second Report and Order* consolidated existing narrowband allocations to the upper half of the 700 MHz Public Safety band (769-775/799-805 MHz).[883] To effectuate this consolidation of the narrowband channels, we required the D Block licensee to pay the costs of relocating existing narrowband radios from TV channels 63 and 68 (at 764-767 MHz and 794-797 MHz), and the upper one megahertz of channels 64 and 69 (at 775-776 MHz and 805-806 MHz), and capped the disbursement amount for relocation costs at $10 million.[884] We also cautioned that any narrowband equipment deployed in channels 63 and 68, or in the upper one megahertz of channels 64 and 69, more than 30 days following the adoption date of the *Second Report and Order – i.e.*, after August 30, 2007 – would be ineligible for relocation funding.[885] In addition, we prohibited authorization of any new narrowband operations in that spectrum, as of 30 days following the adoption date of the *Second Report and Order* (*i.e.*, as of August 30, 2007).[886]

428. In the *Second Report and Order*, we further found that, in order to maximize the benefits of the 700 MHz nationwide, interoperable broadband communications network, 700 MHz narrowband public safety operations then existing under the old narrowband band plan needed to be consolidated and cleared no later than the DTV transition date (*i.e.*, February 17, 2009).[887] We required every public safety licensee impacted by the consolidation to file a certification with the Commission no later than 30 days from the effective date of the *Second Report and Order*, including certain information to account for "pre-programmed narrowband radios that public safety agencies may have already taken delivery as of the adoption date of [the *Second Report and Order*] and intend to immediately place into operation."[888] We emphasized that such information was "integral to the success of the relocation process," and cautioned public safety entities that failing to file this information in a timely manner would result in forfeiture of

[882] 47 U.S.C § 316(a)(1).

[883] *Second Report and Order*, 22 FCC Rcd at 15406 ¶ 322.

[884] *Second Report and Order*, 22 FCC Rcd at 15412 ¶ 341.

[885] *Second Report and Order*, 22 FCC Rcd at 15412 ¶ 339.

[886] *Second Report and Order*, 22 FCC Rcd at 15412 ¶ 339.

[887] *Second Report and Order*, 22 FCC Rcd at 15406 ¶ 322.

[888] *Second Report and Order*, 22 FCC Rcd at 15411 ¶ 336.

reimbursement.[889] As "an additional measure to define and contain the costs that would be entitled to reimbursement," we prohibited any new authorizations outside of the consolidated narrowband segment, stating that such a prohibition would "ensure that the relocation proceeds in an orderly manner and without complications stemming from additional operations being deployed in spectrum being reallocated."[890] Moreover, as "an additional means to ensure the integrity of the relocation process," we imposed a $10 million cap based on the best evidence available in the record at the time of the *Second Report and Order*.[891]

429. Two parties filed petitions seeking reconsideration of some or all of the foregoing requirements in the *Second Report and Order*.[892] Among other things, these parties challenged the adequacy of the $10 million cap on relocation expenses.[893] A number of other parties also supported revising or eliminating the relocation cap.[894]

430. One petitioner also asked that the Commission make clear that parties who purchased and began to deploy systems before the August 30, 2007, cut-off date can continue to deploy those systems after August 30, and obtain full reimbursement for the relocation of all such systems.[895] Another party asked the Commission to modify the *Second Report and Order* to permit continued authorization and deployment of statewide radio public safety systems that were in the process of construction and implementation as of the date of the *Second Report and Order* in channels 63 and 68 and the upper one megahertz of channels 64 and 69 through January 31, 2009; allow the owner of any such statewide radio public safety system to obtain reimbursement for all of its costs incurred in the installation of such system; and reconsider the $10 million cap on rebanding costs.[896]

431. In the *Second Further Notice*, mindful of the desire to provide certainty to potential bidders as to the relocation obligation that would attach to the winner of the D Block spectrum, we sought comment on whether we should revise or eliminate the $10 million cap on relocation expenses.[897] We asked parties to provide specific data and cost estimates regarding relocation expenses, particularly taking into account the certifications filed in the docket pursuant to the *Second Report and Order.*[898]

432. Given the proposed re-auction of the D Block and associated timing, we also sought comment on the date by which such relocation must be completed. In particular, we asked whether we should continue to require that relocation be completed by the DTV transition date or set an alternative date, and if so, what such alternate date should be.[899] We also asked whether we should allow relocation to occur on a rolling basis, such that the D Block licensee would be required to relocate narrowband operations only as the broadband network is built out in a particular market and, if so, how much notice

[889] *Second Report and Order*, 22 FCC Rcd at 15411 ¶ 337.

[890] *Second Report and Order*, 22 FCC Rcd at 15412 ¶ 339.

[891] *Second Report and Order*, 22 FCC Rcd at 15412 ¶ 341.

[892] *See* Virginia Petition for Reconsideration; Pierce Transit Petition for Reconsideration.

[893] *See* Virginia Petition for Reconsideration; Pierce Transit Petition for Reconsideration.

[894] *See* National Association of Telecommunications Officers and Advisors (NATOA) Comments at 9-11; State of Nebraska (Nebraska) Opposition at 2; Motorola Comments at 1-7.

[895] *See generally* Pierce Transit Petition for Reconsideration.

[896] *See generally* Virginia Petition for Reconsideration.

[897] *See Second Further Notice*, 23 FCC Rcd at 8111 ¶ 180.

[898] *See Second Further Notice*, 23 FCC Rcd at 8111 ¶ 180.

[899] *See Second Further Notice*, 23 FCC Rcd at 8111 ¶ 181.

the D Block licensee should be required to give to a narrowband licensee in advance of relocation.[900] We further sought comment on any other viable mechanism for facilitating relocation, and the appropriate timing of such an approach.[901] We also asked whether we should retain the requirement that capped costs be deposited in a trust account to be administered by the Public Safety Broadband Licensee or, if we were to eliminate the cap, how the trust mechanism would function.[902] With respect to management of the reimbursement process, we asked whether we should continue to require that the Public Safety Broadband Licensee manage the reimbursement process for the narrowband licensees.[903] In the event that maintaining such requirement is appropriate, we sought comment on whether we should require that public safety entities seeking reimbursement provide detailed cost information to the Public Safety Broadband Licensee, what such cost information should entail, and whether the Public Safety Broadband Licensee should be afforded discretion in assessing the soundness of the cost estimates.[904] We also asked whether the Public Safety Broadband Licensee can leverage its status as a nationwide license holder to negotiate terms with equipment and technology vendors to relocate multiple narrowband operations, and thus achieve economies of scale.[905] We further asked whether the Public Safety Broadband Licensee should have recourse to the Commission if it determines the cost estimates provided by individual public safety entities, including those passed through by technology or equipment vendors, are unreasonable.[906]

433. With respect to the August 30, 2007 cut-off date established in the *Second Report and Order* for narrowband deployments outside of the consolidated narrowband spectrum, we sought comment on whether extension of that deadline is inappropriate, and any other issue related to the reconsideration petitions filed by Virginia and Pierce Transit.[907] We received a number of comments addressing the various issues associated with the narrowband relocation, as detailed below.

(i) February 17, 2009, Relocation Deadline

434. Comments. With respect to the deadline for relocating narrowband operations that were in place prior to August 30, 2007, several commenters agree that the Commission should extend the February 17, 2009, deadline for such action adopted in the *Second Report and Order*.[908] The PSST, for example, stated that, "[s]ince the date for the D-Block re-auction has not yet been set, and since the successful auction will be followed by the NSA negotiation process, it does not seem realistic for the FCC to retain the February 17, 2009 completion date."[909] The PSST recommended instead that the narrowband relocation deadline be set "twelve months after funding from the D Block winner becomes available."[910]

435. Motorola agreed with the PSST that "a new deadline for relocation be established twelve

[900] *See Second Further Notice*, 23 FCC Rcd at 8111 ¶ 181.

[901] *See Second Further Notice*, 23 FCC Rcd at 8111 ¶ 181.

[902] *See Second Further Notice*, 23 FCC Rcd at 8111 ¶ 181.

[903] *See Second Further Notice*, 23 FCC Rcd at 8111 ¶ 181.

[904] *See Second Further Notice*, 23 FCC Rcd at 8111 ¶ 181.

[905] *See Second Further Notice*, 23 FCC Rcd at 8111 ¶ 181.

[906] *See Second Further Notice*, 23 FCC Rcd at 8111 ¶ 181.

[907] *See Second Further Notice*, 23 FCC Rcd at 8111 ¶ 182.

[908] *See, e.g.*, Ada County Sherriff's Office Comments at 1; APCO Comments at 39; NRPC Comments at 7; NPSTC Comments at 23; Motorola Comments at 21; Louisiana Comments at 2; TeleCommUnity Comments at 7; Eads Comments at 4; Lencioni Comments at 1.

[909] PSST Comments at 51-52.

[910] PSST Comments at 52.

months after funding from the D Block winner becomes available."[911] Motorola further asserted that such revised deadline would "provide[] a more realistic time frame to effectuate relocation than the Commission's previously adopted policies."[912] AASHTO argued that "the relocation of existing narrowband users should be grandfathered until there are funding mechanisms in place to reimburse the public safety agencies for the costs involved in returning or replacing equipment incapable of being returned."[913] AASHTO also supported using "rolling dates for the relocation of existing users coupled with the availability of the network in their area."[914]

436. Discussion. As indicated above, in the *Second Report and Order* we required narrowband operations that had already been deployed under the prior 700 MHz band plan on channels 63 and 68, and the upper one megahertz of channels 64 and 69, to be relocated to and consolidated within the new narrowband channels (at 769-775 MHz/799-805 MHz) by the DTV transition deadline of February 17, 2009.[915] Implicit in our decision to adopt February 17, 2009, as the relocation deadline were the assumptions that Auction 73 would yield a national D Block licensee and that the NSA would be successfully negotiated and approved with sufficient time to effect the narrowband relocations prior to February 17, 2009 – the deadline by which the public safety broadband frequency bands must be vacated by current analog television operations. Those assumptions did not materialize and, therefore, an extension of the current February 17, 2009, deadline for completing the relocation of all narrowband operations to the consolidated narrowband channels appears warranted.

437. In determining a new narrowband relocation deadline, we continue to believe that a uniform deadline is required to allow both the D Block licensee and the public safety community to concentrate on deploying a shared network in the 700 MHz public safety broadband spectrum, unconstrained by the presence of narrowband operations. While we understand that the shared broadband network will be constructed over time, and may reach some areas of the country sooner than others, we believe that tying narrowband relocations to actual or planned buildout of the network on a rolling or otherwise piecemeal basis would be impractical and inefficient, and could cause delays in network deployment. We agree with the PSST that a single relocation deadline tied to the availability of funding is the most prudent course.[916] Accordingly, we propose to extend the narrowband relocation deadline to twelve months from the date upon which narrowband relocation funding is made available by the D Block licensee(s), which as explained below, will be no later than the date upon which the executed NSA(s) is submitted to the Commission for approval.

(i) $10 Million Cap

438. Comments. As to the $10 million cap on narrowband relocation cost reimbursement, several commenters argued that the $10 million cap is inadequate.[917] The PSST, for example, recommended that that the Commission "replace the current $10 Million cap on the D Block licensee's reimbursement obligation with a cap of $75 Million."[918] According to the PSST, "the current cap

[911] Motorola Reply Comments at 6.

[912] Motorola Reply Comments at 6.

[913] AASHTO Comments at 13.

[914] AASHTO Comments at 13.

[915] *Second Report and Order*, 22 FCC Rcd at 15410 ¶ 332.

[916] *See* PSST Comments at 52. *See also* Motorola Reply Comments at 6; NPSTC Comments at 24.

[917] *See, e.g.*, Louisiana Comments at 2; APCO Comments at 39; Pierce Transit Comments at 5; NATOA *et al.* Comments at 16; Virginia Comments at 5; NPSTC Comments at 24; Eads Comments at 3; Lencioni Comments at 1; RPC 33 Comments at 20; RPC 20 Reply Comments at 11.

[918] PSST Comments at 53.

substantially underestimates the funds needed to address this situation based on [] extensive work with the affected public safety agencies, equipment vendors and with organizations such as the NPSTC that have committed time and resources toward identifying a cost-effective solution."[919] The PSST also observed that "it has been determined that the original cost estimate failed to include one critical equipment category: the vehicular repeater," the retuning of which "will significantly increase the total relocation cost."[920] The PSST further asserted that its proposed $75 million cap "is but a fraction of the anticipated cost of purchasing the spectrum at auction and deploying and operating the SWBN [and] not an amount that should deter an otherwise interested D Block bidder."[921]

439. The Ada County Sheriff's Office argued that, "the $10M cap…is far too low for the actual cost of relocating users to the new band."[922] According to Ada County Sheriff's Office, relocation funding should instead be "based upon actual relocating costs for each agency affected."[923] The Commonwealth of Virginia argued that "no 'cap' on public safety relocation is appropriate given the very substantial proceeds which will be realized form this D Block auction … the commercial users should pay the full relocation costs of the public safety entities, who generally lack budget flexibility or surplus funding to allow them to absorb these costs."[924]

440. Pierce Transit argued that "the Commission to this day has no information on which it can rely with any reasonable degree of confidence, as to what the incumbent public safety licensees' aggregate relocation costs will be," and "imposing the $10 million cap, without having any concrete, verifiable information on the true cost of reconfiguring incumbent operations, raises the specter that the dozens of affected public organizations may be subject to either pro rata or first come, first serve reimbursements that cannot hope to fully compensate affected entities for their full relocation costs."[925]

441. Motorola observed that "[t]he costs of relocation vary widely," and thus "[a] complete and accurate estimate of relocation costs can only be created by soliciting information directly from individual public safety agencies as relocation costs will vary by equipment and agency."[926] Motorola further argued that in order to collect this information, "the FCC should require public safety agencies seeking reimbursement to provide detailed cost information to the PSBL or the FCC directly within 90 days from the date of a Commission Public Notice that would start this process."[927]

442. The National Association of Telecommunications Officers and Advisors *et al.* asserted that "[t]he cost of relocation must be borne by the D Block licensee, and the timing for accomplishing this task must be more attuned to the timing under which the D Block licensee will be able to make use of the spectrum."[928]

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[919] PSST Comments at 53. *See also*, Motorola Reply Comments at 5.

[920] PSST Comments at 53.

[921] PSST Comments at 53.

[922] Ada County Sheriff's Office Comments at 1.

[923] Ada County Sheriff's Office Comments at 1.

[924] Commonwealth of Virginia Comments at 5-6.

[925] Pierce Transit Comments at 5-6.

[926] Motorola Comments at 19. Motorola asserted in its Reply Comments that its initial estimate on narrowband relocation costs "did not include any management costs or other costs that licensees and the parties actually performing the reconfiguration may determine are appropriate and reasonable." Motorola Reply Comments at 5.

[927] Motorola Comments at 19.

[928] NATOA *et al.* Reply Comments at 9.

443. Discussion. We agree with the majority of commenters who suggested that the $10 million cap on narrowband relocation costs to be reimbursed by the D Block licensee may be inadequate to fully reimburse public safety entities for the likely costs of relocation. We adopted the $10 million cap in the *Second Report and Order* based upon the record received in response to the preceding *700 MHz Further Notice*, which sought information regarding both the number of narrowband radios deployed and in use, and the costs involved in consolidating the narrowband channels.[929] We received no information regarding the costs of funding relocation except for a response from Motorola, in which it estimated 750,000-800,000 radios currently deployed and a relocation cost of approximately $10 million.[930]

444. Since we adopted the *Second Report and Order*, we have received and reviewed additional information on the number and types of equipment deployed in the 700 MHz band, in the form of the certifications from public safety licensees regarding the number of handsets, base stations and repeaters that they had in operation as of August 30, 2007.[931] The Commonwealth of Virginia estimates its costs of relocation at $48 to $100 per handset, $1,000 per repeater unit, and $3,000 per base station.[932] Similarly, Motorola estimates the cost of relocation for a mobile/portable unit would be $100, and the cost for a base transmitter site would be $3,000.[933] These costs also are consistent with our experience with rebanding efforts in the 800 MHz band. Based on our review of the certifications filed, and using the maximum per-unit estimates suggested by the Commonwealth of Virginia, we calculate the cost of relocating equipment that public safety licensees have certified as being in operation by August 30, 2007, at approximately $23.6 million.[934] This figure also assumes that every handset and transmitter in operation as of the cut-off date would require relocation reimbursement. Moreover, while not all of the entities that have sought waivers of the August 30, 2007, cut-off for new narrowband deployments outside the consolidated channels have sought reimbursement for the costs of relocating such equipment, we note that even if we assumed full reimbursement for each waiver requested, taking such action would add approximately $3 million to our revised $23.6 million relocation cost estimate.[935] Thus, including

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[929] Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band; Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, WT Docket Nos. 06-150, 01-309, 03-264, 06-169, 96-86, CC Docket No. 94-102, PS Docket No. 06-229, *Report and Order and Further Notice of Proposed Rulemaking*, 22 FCC Rcd 8064, 8159 ¶ 264 (2007) (*700 MHz Further Notice*).

[930] *See Second Report and Order*, 22 FCC Rcd at 15410 ¶ 333.

[931] *See Second Report and Order*, 22 FCC Rcd at 15411 ¶¶ 336, 337; Public Safety and Homeland Security Bureau Announces an October 23, 2007 Deadline for Filing 700 MHz Relocation Certification Information, PS Docket No. 06-229, WT Docket No. 96-86, *Public Notice* (PSHSB 2007).

[932] Virginia Petition for Reconsideration at 10. Virginia suggests that the Commission reopen the record for more information on costs. *Id*. at 11. As we have explained, parties have already had ample notice and opportunity to submit cost information into the record in this proceeding, including a call again for such information in the *Second Further Notice*. *See Second Further Notice*, 23 FCC Rcd at 8111 ¶ 180. Moreover, in light of the information received through the certification process, we find there is no need to reopen this issue.

[933] Motorola June 2007 *Ex Parte* at 2-3.

[934] Our review of these certifications has identified approximately: 100,658 mobiles, 6,511 vehicular repeaters, 3,180 control stations, and 1,170 base stations.

[935] This $3 million figure represents the aggregate costs that would apply to relocate the subject waiver narrowband equipment that was contracted, paid for and received to be deployed in the non-consolidated narrowband channels (*i.e*., in the 764-767/775-776 MHz and 794-797/805-806 MHz frequency bands) prior to the August 10, 2007, release date of the *Second Report and Order* only. In our *Virginia Waiver Order*, we determined that "[i]t is in the public interest, therefore, to provide interim waiver relief for continued deployment outside of the consolidated narrowband channels where there has been a showing of potential public harm and there is evidence of a comprehensive 700 MHz deployment plan that predates August 30, 2007 for which equipment has been received (continued….)

both the equipment certified as eligible for reimbursement under the *Second Report and Order* and equipment permitted to be deployed after the August 30, 2007, cut-off date pursuant to a waiver, total reimbursement liability for the D Block licensee(s) would stand at approximately $26.6 million.[936]

445. In light of the foregoing, we tentatively propose to cap the narrowband relocation reimbursement costs for which the D Block licensee(s) would be obligated to pay at $27 million.[937] We emphasize that, based upon the entire record before us, this figure should be more than sufficient to ensure that all public safety entities are fully reimbursed their costs for relocating their narrowband systems to the consolidated narrowband channels. This figure includes generous assumptions, using maximum per unit costs and assuming every handset, base station and vehicle repeater, including those that are the subject of waiver requests, would require relocation reimbursement. To account for the possibility that the D Block auction could result in the issuance of regional licenses to more than one regional licensee, we propose setting individual caps for each RPC region based upon the certification and waiver request data before us, with the aggregate cap remaining at $27 million. The proposed break-down for the cap for each region is set forth in Appendix D to this Third Further Notice.[938] We propose that each regional D Block licensee would be responsible for paying the cost of narrowband relocation within its region(s). In the event that one or more D Block regional licenses remains unsold, we propose that the cost of relocating 700 MHz narrowband facilities in such region(s) would be prorated among the remaining D Block licensees.

(ii) August 30, 2007 Cut-off Date

446. Comments. With respect to the August 30, 2007, cut-off date for narrowband deployments outside of the consolidated narrowband spectrum, several commenters proposed that the cut-off date should be extended.[939] The Commonwealth of Virginia, for example, asserted that, "any absolute August 30, 2007 cutoff date was inappropriate for systems which had already entered into contractual commitments for system deployment as of the date of the Second Report and Order … any August 30, 2007 date must apply both to equipment installed as of that date, and contracted for as of that date."[940] Tyco suggested that "the Commission leniently grant 'case-by-case' waivers for narrowband deployments to ensure the proper function of mission-critical communication systems."[941] According to Tyco, "[s]uch time extensions, coupled with the increased funding, will help to avoid undue burdens on existing public safety users."[942]

447. The PSST, however, argued that the Commission should "maintain the August 30, 2007

(Continued from previous page)
and/or deployed." Request for Waiver of Commonwealth of Virginia, PS Docket No. 06-229, WT Docket No. 96-86, Order, at ¶ 7.

[936] To be clear, this amount represents the aggregate hard costs directly associated with modifications necessary to implement the relocation of base stations, mobiles and portables, and not for any unrelated improvements.

[937] We observe that there is no substantiation in the record for the PSST's proposed reimbursement cap of $75 million.

[938] In instances where a state narrowband system operates in more than one RPC region, we propose that the state provide the PSBL with data concerning the location of its narrowband equipment so that the PSBL can apportion the total reimbursement amount to be paid by the respective D Block licensee for each region.

[939] *See, e.g.*, Louisiana Comments at 2; Pierce Transit Comments at 6; Motorola Comments at 21; TeleCommUnity Comments at 6; Eads Comments at 4.

[940] Virginia Comments at 10. *See also* Motorola Reply Comments at 7.

[941] TE M/A-COM Comments at 9.

[942] TE M/A-COM Comments at 9.

deadline for equipment whose relocation costs will be reimbursable."[943] The PSST asserted that it "is well aware of the difficulties this presents for certain licensees, but [] sees no reasonable alternative that would not seriously undermine the deployment of the SWBN in a timely fashion."[944] The Region 33 (Ohio) 700 MHz Regional Planning Committee agreed that the date should not be changed, stating, "[t]hat was about 10 months ago and agencies have had to make adjustments in their rollout of the affected frequencies. To ask them to change the plan again would be doing them a disservice."[945]

448. The Virginia Information Technologies Agency ("VITA") favored an approach "that allows for both a post August 30, 2007 deployment strategy and a process that allows for those units deployed after the August 30, 2007 deployment date to have access to additional relocation funding opportunities to move them to the consolidated band plan in a uniform manner."[946] According to VITA, such approach would result in "a congruent process that allows for uniform deployment, band relocation and relocation funding."[947]

449. Discussion. As indicated, in the *Second Report and Order*, we prohibited new narrowband operations outside of the consolidated narrowband blocks as of 30 days following the adoption date of the *Second Report and Order – i.e.*, as of August 30, 2007.[948] We further required every public safety licensee impacted by such consolidation to file a certification with the Commission identifying narrowband deployment information to account for pre-programmed narrowband radios that public safety agencies may have already taken delivery as of the adoption date of the *Second Report and Order* and which they intended to immediately place into operation.[949] We emphasized that such information was "integral to the success of the relocation process," and cautioned public safety entities that failing to file this information in a timely manner would result in forfeiture of reimbursement.[950] The primary purposes behind the adoption of this cut-off date and associated certification requirements were to clearly define and contain the costs that would be entitled to reimbursement, and to ensure that the relocation of narrowband operations would proceed in an orderly manner and without complications stemming from additional operations being deployed in spectrum being reallocated for broadband use.[951] We made clear that public safety entities could place into operation narrowband equipment in the consolidated narrowband blocks 769-775 and 799-805 MHz.[952]

450. As advocated by the PSST and others,[953] we tentatively conclude that the existing August 30, 2007, cut-off date should not be changed. The underlying necessities of adopting this date – containing relocation costs, encouraging narrowband deployment in the consolidated narrowband channels and, more generally, carrying out a swift and thorough narrowband relocation process in order to quickly and efficiently establish the nationwide, interoperable public safety broadband network – have not

[943] PSST Comments at 52.

[944] PSST Comments at 52.

[945] RPC 33 Comments at 20.

[946] VITA Comments at 5.

[947] VITA Comments at 5.

[948] *Second Report and Order*, 22 FCC Rcd at 15406, 15412 ¶ 339.

[949] *Second Report and Order*, 22 FCC Rcd at 15406, 15411 ¶ 336.

[950] *Second Report and Order*, 22 FCC Rcd at 15406, 15411 ¶ 337.

[951] *Second Report and Order*, 22 FCC Rcd at 15406, 15412 ¶ 339.

[952] *Second Report and Order*, 22 FCC Rcd at 15406, 15412 ¶ 339.

[953] *See* PSST Comments at 52; RPC 33 Comments at 20.

changed since its adoption in the *Second Report and Order*. We appreciate the Commonwealth of Virginia's arguments that the August 30, 2007, cut-off date may have been inappropriate in cases where entities already entered into contractual commitments for systems prior to the adoption of the *Second Report and Order*.[954] However, based upon the petitions seeking waiver of this cut-off date that we have received thus far, it appears that relatively few entities fall into this category and we believe such individualized determinations are best made on a case-by-case basis through the waiver process.[955]

451. We recognize, however, that while the waiver process has thus far provided continuing operating authority beyond the August 30, 2007, cut-off deadline for equipment contracted for prior to the adoption of the *Second Report and Order*, a decision as to whether costs for relocating equipment deployed after this date could be reimbursed was deferred until the outcome of this proceeding.[956] Accordingly, we tentatively conclude that for those parties granted waiver relief to date, and seeking reimbursement for relocating equipment deployed pursuant to such waiver, the costs for relocating such equipment will be eligible for reimbursement by the D Block licensee. In this regard, we would delegate authority to the PSHSB to grant such relief. We also tentatively conclude that the PSHSB, acting under delegated authority, may grant similar relief with respect to pending waiver requests, so long as the request meets the criteria we have established for granting waiver authority to deploy narrowband systems after the August 30, 2007 cut-off date – *i.e.*, where there has been a showing of potential public harm and there is evidence of a comprehensive 700 MHz deployment plan that predates August 30, 2007, for which equipment has been received and/or deployed. As observed above, we calculate that the total cost of relocating such equipment is approximately $3 million, and thus there would be sufficient funding available for waiver applicants meeting these criteria. We also tentatively conclude that, as of the release date of this *Third Further Notice*, we will not accept any new waiver requests to deploy narrowband equipment outside of the consolidated narrowband blocks, or amendments to pending waiver requests that would increase the number of narrowband radios that would require relocation reimbursement. We propose taking this action in the interests of ensuring certainty with respect to the total relocation costs and in recognition of the fact that any parties requesting relief would already have submitted waiver requests.

(iii) Funding Mechanism

452. Comments. Most commenters addressing the issue of how the narrowband relocation funding should be processed agreed that the source of such funding should be the D Block licensee and the administration of such funding should be handled by the Public Safety Broadband Licensee. Motorola, for example, asserted that, "if the Commission proceeds with a Public/Private Partnership, once the D-Block is successfully auctioned and appropriate Network Sharing Agreements are executed, the D-Block licensee(s) should be required to deposit the reimbursement funds into a trust fund administered by the PSBL."[957]

453. The State of Louisiana suggested "a process in which Louisiana and other public safety agencies impacted by the 700 MHz narrowband reconfiguration can develop and provide actual cost

[954] *See* Virginia Comments at 10.

[955] In establishing the prohibition on new narrowband operations after August 30, 2007, it was not our intention to create hardship or delay systems needed to protect the safety of life and property, and we have provided interim waiver relief to various public safety entities for continued deployment outside of the consolidated narrowband channels where there has been a showing of potential public harm and there is evidence of a comprehensive 700 MHz deployment plan that predates August 30, 2007 for which equipment has been received and/or deployed. *See Virginia Waiver Order* at ¶ 7.

[956] *See*, *e.g.*, *Virginia Waiver Order* at ¶ 8.

[957] Motorola Comments at 20.

estimates for the equipment that we have already deployed, and that now needs to be relocated per the new narrowband plan."[958] Additionally, the State of Louisiana favored making the PSST "the central clearing point for gathering these cost estimates from all affected public safety agencies."[959]

454. APCO asserted that "the Commission should retain the requirement that the D Block licensee pay the cost of relocating narrowband licensees," because "regardless of any public/private partnership, the D Block licensee will benefit from the reconfiguration of the 700 MHz band as it eliminates a potential interference problem."[960] APCO further stated, however, that the "Commission should consider relieving the PSBL of the responsibility of managing the relocation funding," because "it adds a function unrelated to the PSBL's core activity, and deepens its reliance on outside contractors for which it lacks the funds to support."[961] APCO contended that "the Commission should [instead] appoint a third party (as it did with the 800 MHz Transition Administrator) or require the D Block licensee to retain the services of an entity that will manage the process."[962] NPSTC opposed APCO's position on removing the PSBL from responsibility for overseeing narrowband relocations, asserting that such action would be a "set back to an important facet of the Commission's decision to realign the 700 MHz spectrum and create a public private partnership to deploy and manage a nationwide broadband network."[963] NPSTC further argued that "[t]he PSBL's work with regard to the relocation of 700 MHz narrowband incumbents demonstrates tangibly not only its dedication to the Commission's decisions but its ability to work with the often competing interests."[964]

455. Discussion. In the *Second Report and Order*, we required that the Upper 700 MHz Band D Block licensee pay the costs associated with relocating public safety narrowband operations, in recognition of the significant benefits that will accrue to the D Block licensee.[965] These fundamental benefits would not change under the 700 MHz Public/Private Partnership construct we are tentatively proposing here – whether such partnership is implemented on a regional or nationwide basis. Further, bidders for the D Block licenses will be able to factor the prospective cost of narrowband relocation into their auction bids. Accordingly, we tentatively conclude that we will retain the requirement that the Upper 700 MHz Band D Block nationwide licensee, or regional licensees, as determined by the auction, must pay the costs associated with relocating public safety narrowband operations to the consolidated narrowband channels.

456. In terms of funding mechanics, we also continue to believe that the Public Safety Broadband Licensee is best suited to administer the relocation process consistent with the requirements and deadlines set forth herein.[966] The Public Safety Broadband Licensee is composed of board members with significant experience and expertise involved with assuming this role and in fact already has demonstrated efforts working on the narrowband relocation issues.[967]

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[958] Louisiana Comments at 2.

[959] Louisiana Comments at 2.

[960] APCO Comments at 39.

[961] APCO Comments at 39.

[962] APCO Comments at 39.

[963] NPSTC Reply Comments at 15.

[964] NPSTC Reply Comments at 15.

[965] *Second Report and Order*, 22 FCC Rcd at 15336 ¶ 120, 15411 ¶ 336.

[966] *Second Report and Order*, 22 FCC Rcd at 15413-414, 15426-427 ¶¶ 343-44, 383.

[967] *See*, *e.g.*, PSST Comments at 53.

457. We reiterate that under our proposal the D Block licensee(s') reimbursement obligation will be limited to the minimum "hard" costs directly associated with modifications necessary to implement the relocation of base stations, mobiles and portables, and will not extend to any "soft" costs, such as person-hours expended in effecting such modifications, or costs associated with unrelated improvements.[968] We also will not permit such funding to cover costs associated with any modifications that may be necessary to the Computer Assisted Pre-Coordination Resource and Database ("CAPRAD") system or other programs used by Regional Planning Committees to assign channels, or to any costs associated with amendments to regional plans or narrowband licenses.[969]

458. We understand that the Public Safety Broadband Licensee will incur administrative costs in administering the relocation process. In this respect, the PSBL may recover such costs along with its other administrative and operating costs through the D Block licensee(s) funding mechanisms described elsewhere in this Third Further Notice.

459. We also propose to retain the narrowband relocation implementation process developed in the *Second Report and Order*, with conforming provisions to address the possibility of regional licensing. Under this approach, we will require the winning bidder(s) for the D Block license(s) and the Public Safety Broadband Licensee jointly to submit for Commission approval a narrowband relocation plan(s) within 30 days following the NSA Negotiation Commencement Date.[970] If the D Block is licensed on a regional basis, the Public Safety Broadband Licensee and regional D Block license winners would jointly submit for Commission approval separate narrowband relocation plans covering each region within 30 days following the NSA Negotiation Commencement Date. If the D Block is licensed on a regional basis, but not all regional licenses are sold at auction, the Public Safety Broadband Licensee will be solely responsible for submitting a separate narrowband relocation plan covering each unsold region for Commission approval within 30 days following the NSA Negotiation Commencement Date. The nationwide narrowband relocation plan, or regional narrowband relocation plans, as applicable, would address the process and schedule for accomplishing narrowband relocation, including identification of the 700 MHz equipment vendor(s), the make and model numbers of the equipment to be relocated and the relocation cost estimates provided by such vendor(s) (on that vendor's letterhead), identification of equipment vendors or other consultants that would perform the necessary technical changes to handsets, vehicle repeaters, and base stations, and a detailed schedule for completion of the relocation process for every radio and base station identified in the certifications we have previously required and for narrowband equipment operating under previously granted waivers.[971] The plan(s) also would specify the total costs to be incurred for the complete relocation process.[972]

460. If the D Block auction results in a single nationwide D Block license winner, that party would be required, no later than the date upon which the executed NSA is submitted to the Commission, to deposit the total cost amount identified in the narrowband relocation plan, as approved by the Chief of the Public Safety and Homeland Security Bureau, into a trust account established by the Public Safety Broadband Licensee, to finance the narrowband relocation.[973] If the D Block auction results in one or

[968] *Second Report and Order*, 22 FCC Rcd at 15411 ¶ 338.

[969] *Second Report and Order*, 22 FCC Rcd at 15411 ¶ 338.

[970] *Second Report and Order*, 22 FCC Rcd at 15412 ¶ 340.

[971] *Second Report and Order*, 22 FCC Rcd at 15412 ¶ 340.

[972] *Second Report and Order*, 22 FCC Rcd at 15412 ¶ 340.

[973] *Second Report and Order*, 22 FCC Rcd at 15412 ¶ 343. As the Commission further indicated in the *Second Report and Order*, and which we tentatively propose to continue to follow, the trust account established by the Public Safety Broadband Licensee would be for the benefit of public safety licensees being relocated, with the Public Safety Broadband Licensee acting as trustee of such account. The Public Safety Broadband Licensee would (continued….)

more regional D Block license winners, that party(ies) will similarly be required, no later than the date upon which the executed NSA is submitted to the Commission, to deposit the total cost amount identified in the narrowband relocation plan(s) that it, together with the Public Safety Broadband Licensee, submitted to the Commission into a trust account established by the Public Safety Broadband Licensee, to finance the narrowband relocation. In the event that the D Block is licensed on a regional basis, but not all regional licenses are sold at auction, the narrowband relocation costs associated with any such unsold region (identified in the individual narrowband relocation plans submitted for each such region by the Public Safety Broadband Licensee) will be borne on a *pro rata* basis by all the regional D Block license winners. In this latter case, the Commission will delegate authority to the Public Safety and Homeland Security Bureau to determine and identify in a public notice the amount each D Block regional licensee is required to deposit into the narrowband relocation trust account established by the Public Safety Broadband Licensee.

IV. PROCEDURAL MATTERS

A. Initial Regulatory Flexibility Analysis

461. Section 213 of the Consolidated Appropriations Act 2000 provides that the Regulatory Flexibility Act (RFA), 5 U.S.C. § 603, shall not apply to the rules and competitive bidding procedures for frequencies in the 746-806 MHz Band,[974] which includes the frequencies of both the D Block license and the 700 MHz public safety broadband and narrowband spectrum. Accordingly, we have not prepared an Initial Regulatory Flexibility Analysis in connection with the Third Further Notice.

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not be permitted to draw on this account until the D Block license(s) is granted to the D Block auction winner(s), and then would be limited to using these funds solely for relocating eligible narrowband operations consistent with the requirements and limitations set forth herein. The Public Safety Broadband Licensee would then be responsible for implementing the relocation plan, including administering payment of relocation funds to equipment vendors, and ensuring that all affected licensees are relocated in accordance with the relocation schedule contained in the relocation plan as approved by the Chief of the Public Safety and Homeland Security Bureau. *See id*.

[974] In particular, this exemption extends to the requirements imposed by Chapter 6 of Title 5, United States Code, Section 3 of the Small Business Act (15 U.S.C. 632) and Sections 3507 and 3512 of Title 44, United States Code. Consolidated Appropriations Act 2000, Pub. L. No. 106-113, 113 Stat. 2502, Appendix E, Sec. 213(a)(4)(A)-(B); *see* 145 Cong. Rec. H12493-94 (Nov. 17, 1999); 47 U.S.C.A. 337 note at Sec. 213(a)(4)(A)-(B).

B. Initial Paperwork Reduction Act Analysis of 1995 Analysis

462. This document contains proposed new or modified information collection requirements. We note, however, that Section 213 of the Consolidated Appropriations Act 2000 provides that rules governing frequencies in the 746-806 MHz Band, which encompass the spectrum associated with both the D Block license and the 700 MHz public safety broadband and narrowband spectrum, become effective immediately upon publication in the Federal Register without regard to certain sections of the Paperwork Reduction Act.[975] We are therefore not inviting comment pursuant to the Paperwork Reduction Act on any information collections proposed in this document.

C. Other Procedural Matters

1. Ex Parte Presentations

463. The rulemaking shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.[976] Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented generally is required.[977] Other requirements pertaining to oral and written presentations are set forth in Section 1.1206(b) of the Commission's rules.[978]

2. Comment Filing Procedures

464. Pursuant to Sections 1.415 and 1.419 of the Commission's rules,[979] interested parties may file comments on or before the dates indicated on the first page of this document. All filings related to this Third Further Notice should refer to WT Docket No. 06-150 and PS Docket No. 06-229. Comments may be filed using: (1) the Commission's Electronic Comment Filing System (ECFS), (2) the Federal Government's eRulemaking Portal, or (3) by filing paper copies.[980]

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://www.fcc.gov/cgb/ecfs/ or the Federal eRulemaking Portal: http://www.regulations.gov. Filers should follow the instructions provided on the website for submitting comments.

    - ECFS filers must transmit one electronic copy of the comments for WT Docket No. 06-150 and PS Docket No. 06-229. In completing the transmittal screen, filers should include their full name, U.S. Postal Service mailing address, and WT Docket No. 06-150 and PS Docket No. 06-229. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions, filers should send an e-mail to ecfs@fcc.gov and include the following words in the body of the message, "get form." A sample form and directions will be sent in response.

- Paper Filers: Parties who choose to file by paper must file an original and four copies of each filing. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by

[975] *Id*.

[976] 47 C.F.R. §§ 1.200 *et. seq*.

[977] *See* 47 C.F.R. § 1.1206(b)(2).

[978] 47 C.F.R. § 1.1206(b).

[979] 47 C.F.R. §§ 1.415, 1.419.

[980] *See* Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24121 (1998).

first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). All filings must be addressed to the Commission's Secretary, Marlene H. Dortch, Office of the Secretary, Federal Communications Commission, 445 12th Street, S.W., Washington, DC, 20554.

- The Commission's contractor will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, N.E., Suite 110, Washington, DC 20002. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

- U.S. Postal Service first-class, Express, and Priority mail should be addressed to 445 12th Street, S.W., Washington DC 20554.

465. Parties should send a copy of their filings to: Neşe Guendelsberger, Wireless Telecommunications Bureau, 445 12th Street, S.W., Washington, D.C. 20554, or by e-mail to nese.guendelsberger@fcc.gov; and Jeff Cohen, Public Safety and Homeland Security Bureau, 445 12th Street, S.W., Washington, D.C. 20554, or by e-mail to jeff.cohen@fcc.gov. Parties shall also serve one copy with the Commission's copy contractor, Best Copy and Printing, Inc. (BCPI), Portals II, Room CY-B402, 445 12th Street, S.W., Washington, D.C. 20554, (202) 488-5300, or via e-mail to fcc@bcpiweb.com.

466. Documents in WT Docket No. 06-150 and PS Docket No. 06-229 will be available for public inspection and copying during business hours at the FCC Reference Information Center, Portals II, Room CY-A257, 445 12th Street, S.W., Washington, D.C. 20554. The documents may also be purchased from BCPI, telephone (202) 488-5300, facsimile (202) 488-5563, TTY (202) 488-5562, e-mail fcc@bcpiweb.com.

3. Accessible Formats

467. To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to FCC504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY). Contact the FCC to request reasonable accommodations for filing comments (accessible format documents, sign language interpreters, CARTS, *etc*.) by e-mail: FCC504@fcc.gov; phone: 202-418-0530 (voice), 202-418-0432 (TTY).

V. ORDERING CLAUSES

468. Accordingly, IT IS ORDERED pursuant to sections 1, 2, 4(i), 5(c), 7, 10, 201, 202, 208, 214, 301, 302, 303, 307, 308, 309, 310, 311, 314, 316, 319, 324, 332, 333, 336, 337, 614, 615, and 710 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(i), 155(c), 157, 160, 201, 202, 208, 214, 301, 302, 303, 307, 308, 309, 310, 311, 314, 316, 319, 324, 332, 333, 336, and 337, that this THIRD FURTHER NOTICE OF PROPOSED RULEMAKING in WT Docket No. 06-150 and PS Docket No. 06-229 IS ADOPTED. The THIRD FURTHER NOTICE OF PROPOSED RULEMAKING shall become effective upon publication in the Federal Register.

469. IT IS FURTHER ORDERED that pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on the THIRD FURTHER NOTICE OF PROPOSED RULEMAKING on or before 30 days after publication in the Federal Register and reply comments on or before 40 days after publication in the Federal Register.

470. IT IS FURTHER ORDERED that the Commission SHALL SEND a copy of this THIRD FURTHER NOTICE OF PROPOSED RULEMAKING in a report to be sent to Congress and the General Accounting Office pursuant to the Congressional Review Act, 5 U.S.C. § 801(a)(1)(A).

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

Geographical Boundaries of the 58 Public Safety Regions

NUMBER	STATES, COUNTIES & TERRITORIES INCLUDED IN REGIONS
1.	ALABAMA
2.	ALASKA
3.	ARIZONA
4.	ARKANSAS
5.	CALIFORNIA-SOUTH (to the northernmost borders of San Luis Obispo, Kern, and San Bernardino Counties)
6.	CALIFORNIA-NORTH (that part of California not included in California-South)
7.	COLORADO
8.	*NEW YORK-METROPOLITAN* - NEW YORK: Bronx, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Dutchess, and Westchester Counties; NEW JERSEY: Bergen, Essex, Hudson, Morris, Passaic, Sussex, Union, Warren, Middlesex, Somerset, Hunterdon, Mercer, and Monmouth Counties
9.	FLORIDA
10.	GEORGIA
11.	HAWAII
12.	IDAHO
13.	ILLINOIS (all except area in Region 54)
14.	INDIANA (all except area in Region 54)
15.	IOWA
16.	KANSAS
17.	KENTUCKY
18.	LOUISIANA
19.	*New England* - MAINE; NEW HAMPSHIRE; VERMONT; MASSACHUSETTS; RHODE ISLAND; CONNECTICUT
20.	MARYLAND; WASHINGTON, D.C.; VIRGINIA – NORTHERN (Arlington, Fairfax, Fauquier, Loudoun, Prince William and Stafford Counties; and Alexandria, Fairfax, Falls Church, Manassas and Manassas Park Cities)
21.	MICHIGAN
22.	MINNESOTA
23.	MISSISSIPPI
24.	MISSOURI
25.	MONTANA
26.	NEBRASKA

NUMBER	STATES, COUNTIES & TERRITORIES INCLUDED IN REGIONS
27.	NEVADA
28.	NEW JERSEY (except for counties included in the New York-Metropolitan, Region 8, above) PENNSYLVANIA (Bucks, Chester, Montgomery, Philadelphia, Berks, Delaware, Lehigh, Northampton, Bradford, Carbon, Columbia, Dauphin, Lackawanna, Lancaster, Lebanon, Luzerne, Lycoming, Monroe, Montour, Northumberland, Pike, Schuylkill, Sullivan, Susquehanna, Tioga, Wayne, Wyoming and York Counties); DELAWARE
29.	NEW MEXICO
30.	NEW YORK – ALBANY (all except area in New York - Metropolitan, Region 8, and New York - Buffalo, Region 55)
31.	NORTH CAROLINA
32.	NORTH DAKOTA
33.	OHIO
34.	OKLAHOMA
35.	OREGON
36.	PENNSYLVANIA (all except area in Region 28, above)
37.	SOUTH CAROLINA
38.	SOUTH DAKOTA
39.	TENNESSEE
40.	TEXAS - DALLAS (including the counties of Cooke, Grayson, Fannin, Lamar, Red River, Bowie, Wise, Denton, Collin, Hunt, Delta, Hopkins, Franklin, Titus, Morris, Cass, Tarrant, Dallas, Palo Pinto, Parker, Rockwall, Kaufman, Rains, VanZandt, Wood, Smith, Camp, Upshur, Gregg, Marion, Harrison, Panola, Rusk, Cherokee, Anderson, Henderson, Navarro, Ellis, Johnson, Hood, Somervell and Erath)
41.	UTAH
42	VIRGINIA (all except area in Region 20, above)
43.	WASHINGTON
44.	WEST VIRGINIA
45.	WISCONSIN (all except area in Region 54)
46.	WYOMING
47.	PUERTO RICO
48.	U.S. VIRGIN ISLANDS
49.	TEXAS - AUSTIN (including the counties of Bosque, Hill, Hamilton, McLennan, Limestone, Freestone, Mills, Coryell, Falls, Robertson, Leon, San Saba, Lampasas, Bell, Milam, Brazos, Madison, Grimes, Llano, Burnet, Williamson, Burleson, Lee, Washington, Blanco, Hays, Travis, Caldwell, Bastrop, and Fayette)

NUMBER	STATES, COUNTIES & TERRITORIES INCLUDED IN REGIONS
50.	TEXAS - EL PASO (including the counties of Knox, Kent, Stonewall, Haskell, Throckmorton, Gaines, Dawson, Borden, Scurry, Fisher, Jones, Shackelford, Stephens, Andrews, Martin, Howard, Mitchell, Nolan, Taylor, Callahan, Eastland, Loving, Winkler, Ector, Midland, Glasscock, Sterling, Coke, Runnels, Coleman, Brown, Comanche, Culberson, Reeves, Ward, Crane, Upton, Reagan, Irion, Tom Green, Concho, McCulloch, Jeff Davis, Hudspeth, El Paso, Pecos, Crockett, Schleicher, Menard, Mason, Presidio, Brewster, Terrell, Sutton, and Kimble)
51.	TEXAS - HOUSTON (including the counties of Shelby, Nacogdoches, San Augustine, Sabine, Houston, Trinity, Angelina, Walker, San Jacinto, Polk, Tyler, Jasper, Newton, Montgomery, Liberty, Hardin, Orange, Waller, Harris, Chambers, Jefferson, Galveston, Brazoria, Fort Bend, Austin, Colorado, Wharton, and Matagorda)
52.	TEXAS - LUBBOCK (including the counties of Dallam, Sherman, Hansford, Ochiltree, Lipscomb, Hartley, Moore, Hutchinson, Roberts, Hemphill, Oldham, Potter, Carson, Grey, Wheeler, Deaf Smith, Randall, Armstrong, Donley, Collingsworth, Parmer, Castro, Swisher, Briscoe, Hall, Childress, Bailey, Lamb, Hale, Floyd, Motley, Cottle, Hardeman, Foard, Wilbarger, Witchita, Clay, Montague, Jack, Young, Archer, Baylor, King, Dickens, Crosby, Lubbock, Kockley, Cochran, Yoakum, Terry, Lynn, and Garza)
53.	TEXAS - SAN ANTONIO (including the counties of Val Verde, Edwards, Kerr, Gillespie, Real, Bandera, Kendall, Kinney, Uvalde, Medina, Bexar, Comal, Guadalupe, Gonzales, Lavaca, Dewitt, Karnes, Wilson, Atascosa, Frio, Zavala, Maverick, Dimmit, LaSalle, McMullen, Live Oak, Bee, Goliad, Victoria, Jackson, Calhoun, Refugio, Aransas, San Patricio, Nueces, Jim Wells, Duval, Webb, Kleberg, Kenedy, Brooks, Jim Hogg, Zapata, Starr, Hidalgo, Willacy, and Cameron)
54.	*Chicago – Metropolitan* – ILLINOIS: Winnebago, McHenry, Cook, Kane, Kendall, Grundy, Boone, Lake, DuPage, DeKalb, Will, and Kankakee Counties; INDIANA: Lake, LaPorte, Jasper, Starke, St. Joseph, Porter, Newton, Pulaski, Marshall, and Elkart Counties; WISCONSIN: Kenosha, Milwaukee, Washington, Dodge, Walworth, Jefferson, Racine, Ozaukee, Waukesha, Dane, and Rock Counties
55.	NEW YORK - BUFFALO (including the counties of Niagara, Chemung, Schuyler, Seneca, Erie, Chautauqua, Cattaraugus, Allegany, Wyoming, Genesee, Orleans, Monroe, Livingston, Steuben, Ontario, Wayne, and Yates)
56.	GUAM AND THE NORTHERN MARIANA ISLANDS
57.	AMERICAN SAMOA
58.	GULF OF MEXICO

APPENDIX B

Performance Tiers By Public Safety Region

PSR	PSR Name	Total Pops*	Land Area (SqM)*	Density	Coverage Required at End of 15th Year of License Term
8	New York - Metropolitan	19,092,214	9,841	1,940.1	**Tier 1:** 98% coverage required for PSRs with a population density equal to or greater than 500 pops per square mile
47	Puerto Rico	3,808,610	3,425	1,112.1	
48	U.S. Virgin Islands	108,612	134	810.5	
57	American Samoa	57,291	77	744.0	
54	Chicago - Metropolitan	12,685,330	17,100	741.8	
20	Maryland; Washington, DC; Virginia - Northern	7,831,327	12,070	648.8	
56	Guam and the Northern Mariana Islands	224,026	389	575.9	
28	New Jersey, Pennsylvania, Delaware	10,526,480	22,729	463.1	**Tier 2:** 94 % coverage required for PSRs with a population density equal to or greater than 100 pops per square mile and less than 500 pops per square mile
5	California - South	20,637,512	56,512	365.2	
9	Florida	15,982,378	53,927	296.4	
33	Ohio	11,353,140	40,948	277.3	
55	New York - Buffalo	2,852,351	11,780	242.1	
51	Texas - Houston	5,618,958	25,166	223.3	
19	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut	13,922,517	62,809	221.7	
40	Texas - Dallas	6,503,125	30,589	212.6	
11	Hawaii	1,211,537	6,423	188.6	
21	Michigan	9,938,444	56,804	175.0	
36	Pennsylvania	4,801,690	27,672	173.5	
31	North Carolina	8,049,313	48,711	165.2	
14	Indiana	4,763,619	31,283	152.3	
10	Georgia	8,186,453	57,906	141.4	
39	Tennessee	5,689,283	41,217	138.0	
42	Virginia	5,115,733	37,360	136.9	
37	South Carolina	4,012,012	30,109	133.2	
6	California - North	13,234,136	99,447	133.1	
30	New York - Albany	3,182,726	29,379	108.3	
18	Louisiana	4,468,976	43,562	102.6	
17	Kentucky	4,041,769	39,728	101.7	
49	Texas - Austin	2,254,226	24,263	92.9	**Tier 3:** 90 % coverage required for PSRs with a population
43	Washington	5,894,121	66,544	88.6	
1	Alabama	4,447,100	50,744	87.6	
24	Missouri	5,595,211	68,886	81.2	

13	Illinois	3,722,488	49,049	75.9	
44	West Virginia	1,808,344	24,078	75.1	
53	Texas - San Antonio	3,916,309	53,562	73.1	
22	Minnesota	4,919,479	79,610	61.8	
23	Mississippi	2,844,658	46,907	60.6	
45	Wisconsin	2,692,016	48,327	55.7	
15	Iowa	2,926,324	55,869	52.4	
4	Arkansas	2,673,400	52,068	51.3	
34	Oklahoma	3,450,654	68,667	50.3	
3	Arizona	5,130,632	113,635	45.2	
7	Colorado	4,301,261	103,718	41.5	
35	Oregon	3,421,399	95,997	35.6	
16	Kansas	2,688,418	81,815	32.9	
41	Utah	2,233,169	82,144	27.2	
26	Nebraska	1,711,263	76,872	22.3	
50	Texas - El Paso	1,472,545	72,617	20.3	
52	Texas – Lubbock	1,086,657	55,600	19.5	
27	Nevada	1,998,257	109,826	18.2	
12	Idaho	1,293,953	82,747	15.6	
29	New Mexico	1,819,046	121,356	15.0	
38	South Dakota	754,844	75,885	9.9	
32	North Dakota	642,200	68,976	9.3	
25	Montana	902,195	145,552	6.2	
46	Wyoming	493,782	97,100	5.1	
2	Alaska	626,932	571,951	1.1	
58	Gulf of Mexico	-	250,922	-	

* Based on 2000 U.S. Census Data.

The first 55 Public Safety Regions are defined in Public Safety 700 MHz Band – General Use Channels: Approval of Changes to Regional Planning Boundaries of Connecticut and Michigan, *Public Notice*, 16 FCC Rcd 16359 (2001).

APPENDIX C

Proposed Rules

For the reasons discussed in the preamble, the Federal Communications Commission proposes to amend 47 CFR parts 27 and 90 as follows:

PART 27 – MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

1. The authority citation for part 27 continues to read as follows:
Authority: 47 U.S.C. 154, 301, 302, 303, 307, 309, 332, 336, and 337 unless otherwise noted.

2. Section 27.4 is amended by revising the following definitions in alphabetical order to read as follows:

§27.4 Terms and definitions.

* * * * *

Network Sharing Agreement (NSA). An agreement entered into between the winning bidder of an Upper 700 MHz D Block license, the Upper 700 MHz D Block licensee, the Network Assets Holder, the Operating Company, the Public Safety Broadband Licensee, and any other related entities that the Commission may require or allow regarding the shared wireless broadband network associated with that 700 MHz Public/Private Partnership that will operate on the 758-763 MHz and 788-793 MHz bands and the 763-768 MHz and 793-798 MHz bands.

* * * * *

Upper 700 MHz D Block license. The Upper 700 MHz D Block license authorizes services in the 758-763 MHz and 788-793 MHz bands.

* * * * *

3. Section 27.6 is amended by revising paragraphs (a) introductory text and (b)(3) to read as follows:

§ 27.6 Service areas.

(a) WCS service areas include Economic Areas (EAs), Major Economic Areas (MEAs), Regional Economic Area Groupings (REAGs), cellular markets comprising Metropolitan Statistical Areas (MSAs) and Rural Service Areas (RSAs), Public Safety Regions (PSRs) and a nationwide area. MEAs and REAGs are defined in the Table immediately following paragraph (a)(1) of this section. Both MEAs and REAGs are based on the U.S. Department of Commerce's EAs. See 60 FR 13114 (March 10, 1995). In addition, the Commission shall separately license Guam and the Northern Mariana Islands, Puerto Rico and the United States Virgin Islands, American Samoa, and the Gulf of Mexico, which have been assigned Commission-created EA numbers 173- 176, respectively. PSRs are comprised of the fifty five 700 MHz Regional Planning Committee regions, See 66 FR 51669-02 (Oct. 10, 2001)(as modified by Public Notice DA 01-2112, *Public Safety 700 MHz Band – General Use Channels: Approval of Changes to Regional Planning Boundaries of Connecticut and Michigan* (rel. Sept. 10, 2001), and three additional regions. The three additional PSR regions cover the same areas that are covered by the EAs for (1) the Gulf of Mexico; (2) Guam and the Northern Mariana Islands; and (3) American Samoa. PSRs are defined in the table immediately following paragraph (b)(3)(ii). The nationwide area is comprised of the geographic areas covered by the 58 PSRs and covers the same area covered by contiguous 48 states,

Alaska, Hawaii, the Gulf of Mexico, and all of the U.S. territories included in Commission-created EAs. Maps of the EAs, MEAs, MSAs, RSAs, and REAGs and the Federal Register Notice that established the 172 EAs are available for public inspection and copying at the Reference Information Center, Consumer and Governmental Affairs Bureau, Federal Communications Commission, 445 12th Street, SW., Washington, DC 20554. Maps of the PSRs are also available for public inspection and copying at the Reference Information Center, Consumer and Governmental Affairs Bureau, Federal Communications Commission, 445 12th Street, SW., Washington, DC 20554.

* * * * *

(b) * * *

(3) Service areas for Block D in the 758-763 MHz and 788-793 MHz bands will be determined based on the results of the auction for licenses with respect to Block D. The Commission will offer in such an auction licenses for the following geographic service areas:

(i) A nationwide area as defined in paragraph (a) of this section.

(ii) Public Safety Regions (PSRs) as defined in paragraph (a) of this section. The geographic boundaries of the PSRs are defined in the table below:

PSR NUMBER	GEOGRAPHICAL BOUNDARIES OF PUBLIC SAFETY REGIONS (PSRS) STATES, COUNTIES & TERRITORIES INCLUDED IN REGIONS
1.	ALABAMA
2.	ALASKA
3.	ARIZONA
4.	ARKANSAS
5.	CALIFORNIA-SOUTH (to the northernmost borders of San Luis Obispo, Kern, and San Bernardino Counties)
6.	CALIFORNIA-NORTH (that part of California not included in California-South)
7.	COLORADO
8.	*NEW YORK-METROPOLITAN* - NEW YORK: Bronx, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Dutchess, and Westchester Counties; NEW JERSEY: Bergen, Essex, Hudson, Morris, Passaic, Sussex, Union, Warren, Middlesex, Somerset, Hunterdon, Mercer, and Monmouth Counties
9.	FLORIDA
10.	GEORGIA
11.	HAWAII
12.	IDAHO
13.	ILLINOIS (all except area in Region 54)
14.	INDIANA (all except area in Region 54)

PSR NUMBER	GEOGRAPHICAL BOUNDARIES OF PUBLIC SAFETY REGIONS (PSRS) STATES, COUNTIES & TERRITORIES INCLUDED IN REGIONS
15.	IOWA
16.	KANSAS
17.	KENTUCKY
18.	LOUISIANA
19.	*New England* - MAINE; NEW HAMPSHIRE; VERMONT; MASSACHUSETTS; RHODE ISLAND; CONNECTICUT
20.	MARYLAND; WASHINGTON, D.C.; VIRGINIA – NORTHERN (Arlington, Fairfax, Fauquier, Loudoun, Prince William and Stafford Counties; and Alexandria, Fairfax, Falls Church, Manassas and Manassas Park Cities)
21.	MICHIGAN
22.	MINNESOTA
23.	MISSISSIPPI
24.	MISSOURI
25.	MONTANA
26.	NEBRASKA
27.	NEVADA
28.	NEW JERSEY (except for counties included in the New York-Metropolitan, Region 8, above) PENNSYLVANIA (Bucks, Chester, Montgomery, Philadelphia, Berks, Delaware, Lehigh, Northampton, Bradford, Carbon, Columbia, Dauphin, Lackawanna, Lancaster, Lebanon, Luzerne, Lycoming, Monroe, Montour, Northumberland, Pike, Schuylkill, Sullivan, Susquehanna, Tioga, Wayne, Wyoming and York Counties); DELAWARE
29.	NEW MEXICO
30.	NEW YORK – ALBANY (all except area in New York - Metropolitan, Region 8, and New York - Buffalo, Region 55)
31.	NORTH CAROLINA
32.	NORTH DAKOTA
33.	OHIO
34.	OKLAHOMA
35.	OREGON
36.	PENNSYLVANIA (all except area in Region 28, above)
37.	SOUTH CAROLINA
38.	SOUTH DAKOTA
39.	TENNESSEE

PSR NUMBER	GEOGRAPHICAL BOUNDARIES OF PUBLIC SAFETY REGIONS (PSRS) STATES, COUNTIES & TERRITORIES INCLUDED IN REGIONS
40.	TEXAS - DALLAS (including the counties of Cooke, Grayson, Fannin, Lamar, Red River, Bowie, Wise, Denton, Collin, Hunt, Delta, Hopkins, Franklin, Titus, Morris, Cass, Tarrant, Dallas, Palo Pinto, Parker, Rockwall, Kaufman, Rains, VanZandt, Wood, Smith, Camp, Upshur, Gregg, Marion, Harrison, Panola, Rusk, Cherokee, Anderson, Henderson, Navarro, Ellis, Johnson, Hood, Somervell and Erath)
41.	UTAH
42	VIRGINIA (all except area in Region 20, above)
43.	WASHINGTON
44.	WEST VIRGINIA
45.	WISCONSIN (all except area in Region 54)
46.	WYOMING
47.	PUERTO RICO
48.	U.S. VIRGIN ISLANDS
49.	TEXAS - AUSTIN (including the counties of Bosque, Hill, Hamilton, McLennan, Limestone, Freestone, Mills, Coryell, Falls, Robertson, Leon, San Saba, Lampasas, Bell, Milam, Brazos, Madison, Grimes, Llano, Burnet, Williamson, Burleson, Lee, Washington, Blanco, Hays, Travis, Caldwell, Bastrop, and Fayette)
50.	TEXAS - EL PASO (including the counties of Knox, Kent, Stonewall, Haskell, Throckmorton, Gaines, Dawson, Borden, Scurry, Fisher, Jones, Shackelford, Stephens, Andrews, Martin, Howard, Mitchell, Nolan, Taylor, Callahan, Eastland, Loving, Winkler, Ector, Midland, Glasscock, Sterling, Coke, Runnels, Coleman, Brown, Comanche, Culberson, Reeves, Ward, Crane, Upton, Reagan, Irion, Tom Green, Concho, McCulloch, Jeff Davis, Hudspeth, El Paso, Pecos, Crockett, Schleicher, Menard, Mason, Presidio, Brewster, Terrell, Sutton, and Kimble)
51.	TEXAS - HOUSTON (including the counties of Shelby, Nacogdoches, San Augustine, Sabine, Houston, Trinity, Angelina, Walker, San Jacinto, Polk, Tyler, Jasper, Newton, Montgomery, Liberty, Hardin, Orange, Waller, Harris, Chambers, Jefferson, Galveston, Brazoria, Fort Bend, Austin, Colorado, Wharton, and Matagorda)
52.	TEXAS - LUBBOCK (including the counties of Dallam, Sherman, Hansford, Ochiltree, Lipscomb, Hartley, Moore, Hutchinson, Roberts, Hemphill, Oldham, Potter, Carson, Grey, Wheeler, Deaf Smith, Randall, Armstrong, Donley, Collingsworth, Parmer, Castro, Swisher, Briscoe, Hall, Childress, Bailey, Lamb, Hale, Floyd, Motley, Cottle, Hardeman, Foard, Wilbarger, Witchita, Clay, Montague, Jack, Young, Archer, Baylor, King, Dickens, Crosby, Lubbock, Kockley, Cochran, Yoakum, Terry, Lynn, and Garza)

PSR NUMBER	GEOGRAPHICAL BOUNDARIES OF PUBLIC SAFETY REGIONS (PSRS) STATES, COUNTIES & TERRITORIES INCLUDED IN REGIONS
53.	TEXAS - SAN ANTONIO (including the counties of Val Verde, Edwards, Kerr, Gillespie, Real, Bandera, Kendall, Kinney, Uvalde, Medina, Bexar, Comal, Guadalupe, Gonzales, Lavaca, Dewitt, Karnes, Wilson, Atascosa, Frio, Zavala, Maverick, Dimmit, LaSalle, McMullen, Live Oak, Bee, Goliad, Victoria, Jackson, Calhoun, Refugio, Aransas, San Patricio, Nueces, Jim Wells, Duval, Webb, Kleberg, Kenedy, Brooks, Jim Hogg, Zapata, Starr, Hidalgo, Willacy, and Cameron)
54.	*Chicago – Metropolitan* – ILLINOIS: Winnebago, McHenry, Cook, Kane, Kendall, Grundy, Boone, Lake, DuPage, DeKalb, Will, and Kankakee Counties; INDIANA: Lake, LaPorte, Jasper, Starke, St. Joseph, Porter, Newton, Pulaski, Marshall, and Elkart Counties; WISCONSIN: Kenosha, Milwaukee, Washington, Dodge, Walworth, Jefferson, Racine, Ozaukee, Waukesha, Dane, and Rock Counties
55.	NEW YORK - BUFFALO (including the counties of Niagara, Chemung, Schuyler, Seneca, Erie, Chautauqua, Cattaraugus, Allegany, Wyoming, Genesee, Orleans, Monroe, Livingston, Steuben, Ontario, Wayne, and Yates)
56.	GUAM AND THE NORTHERN MARIANA ISLANDS
57.	AMERICAN SAMOA
58.	GULF OF MEXICO

* * * * *

4. Section 27.13 is amended by revising paragraphs (b) and (c) to read as follows:

§ 27.13 License period.

* * * * *

(b) 698–757 MHz, 775–787 MHz and 805-806 MHz bands. Initial authorizations for the 698–757 MHz and 776–787 MHz bands will extend for a term not to exceed ten years from February 17, 2009, except that initial authorizations for a part 27 licensee that provides broadcast services, whether exclusively or in combination with other services, will not exceed eight years. Initial authorizations for the 775–776 MHz and 805–806 MHz bands shall not exceed January 1, 2015. Licensees that initiate the provision of a broadcast service, whether exclusively or in combination with other services, may not provide this service for more than eight years or beyond the end of the license term if no broadcast service had been provided, whichever period is shorter in length.

(c) The paired 758-763 and 788-793 MHz bands. Initial WCS authorizations for the paired 758-763 MHz and 788-793 MHz bands will have a term not to exceed 15 years from the date of initial issuance or renewal.

* * * * *

5. Section 27.14 is amended by renumbering paragraph (o) as paragraph (q) and by revising paragraphs (e), (m), (n), and (o), and adding paragraph (p), to read as follows:

§ 27.14 Construction requirements; Criteria for renewal.

* * * * *

(e) Comparative renewal proceedings do not apply to WCS licensees holding authorizations for the 698–757 MHz and 776–787 MHz bands. These licensees must file a renewal application in accordance with the provisions set forth in § 1.949 of this chapter, and must make a showing of substantial service, independent of its performance requirements, as a condition for renewal at the end of each license term.

* * * * *

(m) A WCS licensee holding an authorization for the D Block in the 758-763 MHz and 788-793 MHz bands (the Upper 700 MHz D Block licensee) shall meet the following construction requirements in each PSR, except for the Gulf of Mexico PSR, comprising its license area.

(1) The Upper 700 MHz D Block licensee shall provide signal coverage and offer terrestrial service to at least 40 percent of the population in each PSR by the end of the fourth year, and 75 percent by the end of the tenth year of its license term. At the end of 15 years, the licensee must meet one of the following final benchmarks depending on the population density of the PSR:

(i) for PSRs with a population density equal to or greater than 500 people per square mile, the licensee will be required to provide signal coverage and offer terrestrial service to at least 98 percent of the population by the end of the fifteenth year.

(ii) for PSRs with a population density equal to or greater than 100 people per square mile and less than 500 people per square mile, the licensee will be required to provide signal coverage and offer terrestrial service to at least 94 percent of the population by the end of the fifteenth year; and

(iii) for PSRs with a population density less than 100 people per square mile, the licensee will be required to provide signal coverage and offer terrestrial service to at least 90 percent of the population by the end of the fifteenth year;

(2) The Upper 700 MHz D Block licensee may modify its population-based construction benchmarks with the agreement of the Public Safety Broadband Licensee and the prior approval of the Commission, where such a modification would better serve to meet commercial and public safety needs. Such modifications must be incorporated into the Network Sharing Agreement.

(3) The Upper 700 MHz D Block licensee shall meet the population benchmarks based using the most recent decennial U.S. Census Data available at the time of measurement for each PSR comprising its license area. The network and signal levels employed to meet these benchmarks must be consistent with the requirements in § 27.1305.

(4) A build-out schedule must be specified in the Network Sharing Agreement consistent with the requirements in this section. The build-out schedule shall include coverage for major highways and interstates, as well as such additional areas that are necessary to provide coverage for all incorporated communities with a population in excess of 3,000, unless the Public Safety Broadband Licensee and the Upper 700 MHz D Block licensee jointly determine, in consultation with a relevant community, that such additional coverage will not provide significant public benefit. Any coverage agreed under the Network

Sharing Agreement to extend to major highways, interstates, and incorporated communities with populations greater than 3,000 beyond the network coverage required by the population benchmarks must be completed no later than the end of the D Block license term. To the extent that coverage of major highways, interstates and incorporated communities with populations in excess of 3,000 requires the D Block licensee to extend coverage beyond what is required to meet its population benchmarks, the licensee shall be permitted to meet that additional coverage through non-terrestrial means, such as Mobile Satellite Service or other such technologies.

(n) The Upper 700 MHz D Block licensee holding an authorization for the Gulf of Mexico PSR shall negotiate with the Public Safety Broadband Licensee, as part of the Network Sharing Agreement, a coverage and service plan for public safety use in that region. Any disputes shall be resolved by the Commission pursuant to the dispute resolution procedures.

(o) The Upper 700 MHz D Block licensee shall demonstrate compliance with performance requirements by filing a construction notification with the Commission within 15 days of the expiration of the applicable benchmark, in accordance with the provisions set forth in § 1.946(d) of this chapter. The licensee must certify whether it has met the applicable performance requirement and must file a description and certification of the areas for which it is providing service. The construction notifications must include the following:

(1) Certifications of the areas that were scheduled for construction and service by that date under the Network Sharing Agreement for which it is providing service, the type of applications it is providing for each area, and the type of technology it is utilizing to provide these applications.

(2) Electronic coverage maps and supporting technical documentation providing the assumptions used by the licensee to create the coverage maps, including the propagation model and the signal strength necessary to provide service.

(p) At the end of its license term, the Upper 700 MHz D Block licensee must, in order to renew its license, make a showing of its success in meeting the material requirements set forth in the Network Sharing Agreement as well as all other license conditions, including the performance benchmark requirements set forth in this section.

* * * * *

6. Section 27.501 is revised to read as follows:

§ 27.501 746-763 MHz, 775-793 MHz, and 805-806 MHz bands subject to competitive bidding.

(a) Mutually exclusive applications for initial licenses in the 746-763 MHz, 775-793 MHz, and 805-806 MHz bands are subject to competitive bidding. The general competitive bidding procedures set forth in part 1, subpart Q of this chapter will apply unless otherwise provided in this subpart.

(b) Competitive bidding rules for licenses in Block D in the 758-763 MHz and 788-793 MHz bands.

(i) Applications for licenses in the 758-763 MHz and 788-793 MHz bands are mutually exclusive if the licenses provide for use of different broadband platform technologies.

(ii) For an auction of licenses in the 758-763 MHz and 788-793 MHz bands covering the entire nation, no licenses will be assigned based on the results of an auction unless at the close of bidding in such auction there are provisionally winning bids for licenses that cover at least fifty percent (50%) of

the nation's population, as determined consistent with the Commission's pre-auction announcement of the population for which each license will authorize service.

(iii) Notwithstanding any provision of Section 1.2104(g)(2)(ii), whether or not combinatorial bidding is available in the auction, the percentage for the additional payment portion of any applicable default payment pursuant to Section 1.2104(g)(2) will equal between 3 and 20 percent of the applicable bid, according to a percentage (or percentages) established by the Commission in advance of the auction.

(iv) Notwithstanding any provision of Section 1.2108, the Commission may defer the resolution of any petition to deny an application for any licenses in the 758-763 MHz and 788-793 MHz bands until the applicant, the Public Safety Broadband Licensee, and any other party the Commission may require or allow execute a Commission-approved NSA and such other agreements as the Commission may require or allow.

(v) Notwithstanding any provisions of Section 1.2109(b) or (c), whether or not combinatorial bidding is available in the auction, if the Commission for any reason does not assign a license to the applicant holding the winning bid for that license at the close of the auction, the Commission may, at its discretion, offer the same license to another party making the next highest bid for that license.

7. Section 27.502 is amended by revising the introductory text and adding paragraph (c) to read as follows:

§ 27.502 Designated entities.

Eligibility for small business provisions.

* * * * *

(c) The spectrum capacity of any Upper 700 MHz D Block license that is subject to any arrangements for the lease or resale (including under a wholesale agreement) of spectrum capacity shall not be considered when applying the provisions of Section 1.2110(b)(1)(iv)(A).

8. Section 27.1303 is amended by revising paragraph (e) to read as follows:

§ 27.1303 Upper 700 MHz D Block license conditions.

* * * * *

(e) The Upper 700 MHz D Block licensee must provide the Public Safety Broadband Licensee with priority access during emergencies, as specified in § 27.1317(e).

* * * * *

9. Section 27.1305 is revised to read as follows:

§ 27.1305 Shared wireless broadband network.

The Shared Wireless Broadband Network developed by the 700 MHz Public/Private Partnership must be designed to meet requirements associated with an interoperable, nationwide public safety broadband network as specified in this section. All specified mandatory requirements as defined in this section must

be incorporated in the Network Sharing Agreement, and shall be used in the determination of compliance under §27.14(p). The Public Safety Broadband Licensee and the Upper 700 MHz D Block licensee may add any capabilities or features beyond those in these rules based on mutually agreeable terms under the Network Sharing Agreement. The Shared Wireless Broadband Network shall incorporate the following:

(a) A design for public safety operations over a broadband IP-based technology platform that (i) utilizes standardized commercial technology, (ii) provides fixed and mobile voice, video, and data capability that is interoperable across public safety local and state agencies, jurisdictions, and geographic areas, and (iii) includes current and evolving state-of-the-art technologies reasonably made available in the commercial marketplace with features beneficial to the public safety community.

(1) Such a design shall provide a nationwide common radio access network air interface to enable the Shared Wireless Broadband Network to support nationwide level interoperability. The common air interface shall allow migration to future technology upgrades. In the case of regional Upper 700 MHz D Block licensees, the common radio access network air interface will be determined via the auction process and each regional Upper 700 MHz D Block licensee will be required to enter into arrangements both with other regional Upper 700 MHz D Block licensees and with the Public Safety Broadband Licensee as necessary to ensure interoperability between their networks. Such arrangements must provide, at a minimum, that each regional Upper 700 MHz D Block licensee will provide the ability to roam on its network to public safety users of all other Shared Wireless Broadband Networks. Regional Upper 700 MHz D Block licensees are not permitted to assess special roaming charges (over and above service fees charged for in-region use) in cases where public safety users require roaming for mutual aid or emergencies.

(2) The technology selected for the Shared Wireless Broadband Network shall be permitted to evolve based on commercial wireless upgrade timeframes, except that future upgrades shall include user equipment backward compatibility, as supported by commercial product availability and specified in the technology standards, to allow for commercially reasonable transition periods for public safety entities' user equipment. The notification and impact management processes relating to technology upgrades, and migration to such upgrades, shall be defined and agreed to in the Network Sharing Agreement.

(3) To promote interoperability between the Shared Wireless Broadband Network and voice-based public safety networks in other frequency bands, the Upper 700 MHz D Block licensee will publish IP-based specifications describing how such other public safety networks may access the Upper 700 MHz D Block licensee's Shared Wireless Broadband Network via bridges and/or gateways. The Upper 700 MHz D Block licensee shall charge these other public safety networks for such access no more than the relevant fee established or approved by the Commission. Public safety users shall bear the costs of the bridges and gateways, including installation and maintenance costs.

(4) The Shared Wireless Broadband Network shall support a Voice over Internet Protocol (VoIP) capability to complement existing public safety mission critical voice communication systems. The VoIP capability shall allow interconnection with the Public Switched Telephone Network as well as with other public safety VoIP users on the network. VoIP features will include but not be limited to Push-To-Talk.

(b) Availability, robustness, and hardening requirements as follows:

(1) The Shared Wireless Broadband Network shall provide 99.6 percent network availability for all terrestrial elements of operation in the coverage areas certified pursuant to §27.14(o)(1), calculated over each license area annually, starting four years after license issuance. The Upper 700 MHz D Block licensee shall use commercially reasonable efforts to provide network availability above this requirement, with the target of 99.9 percent network availability.

(2) The method for measuring availability shall be defined in the Network Sharing Agreement, which shall (i) be a measure of infrastructure availability as measured from the cell site radio antenna through and across the core network; (ii) exclude radio signal coverage and scheduled maintenance downtime with prior notice to the Public Safety Broadband Licensee; (iii) exclude outages caused by actions or events outside the reasonable control of the Upper 700 MHz D Block licensee; and (iv) exclude outages only affecting limited applications.

(3) The Shared Wireless Broadband Network design specifications shall include commercial best practices, such as Network Reliability and Interoperability Council best practices, that take into consideration local influencing factors such as weather, geology, and building codes on network attributes such as hardening of transmission facilities and antenna towers, extended backup power, seismic safety standards, and accommodations for wind, ice, and other natural phenomenon.

(4) The Upper 700 MHz D Block licensee and the Public Safety Broadband Licensee, in consultation with the relevant community, shall jointly designate "critical" sites. The designation of sites as "critical" shall not be required to cover more than 35 percent of the Shared Wireless Broadband Network sites for the Upper 700 MHz D Block license; however, the Upper 700 MHz D Block licensee shall use commercially reasonable efforts to designate as "critical" additional sites requested by the Public Safety Broadband Licensee, up to 50 percent of all the licensee's sites. Sites designated as "critical" shall have battery backup power of 8 hours, and shall have generators with a fuel supply sufficient to operate the generators for at least 48 hours. The Upper 700 MHz D Block licensee shall make commercially reasonable efforts to provide a fuel supply at "critical" sites above this requirement sufficient for a minimum of 5 days. The Upper 700 MHz D Block licensee and the Public Safety Broadband Licensee, in consultation with the relevant community, shall jointly determine the sites that will require redundant backhaul in order to comply with the network availability requirements in this section.

(5) The Upper 700 MHz D Block Licensee and the Public Safety Broadband Licensee may agree on other methods to improve network resiliency in lieu of designating "critical" cell sites as described in paragraph (4) of this subsection. These may include deployment of mobile assets or the use of satellite facilities.

(c) A capability incorporated into the Shared Wireless Broadband Network infrastructure to provide monthly usage reports covering network capacity and priority access so that the Public Safety Broadband Licensee can monitor usage and provide appropriate feedback to the Upper 700 MHz D Block licensee on operational elements of the network.

(d) Security and encryption consistent with commercial best practices. For purposes of complying with this paragraph, the Upper 700 MHz D Block licensee shall:

(1) Comply with U.S. government standards, guidelines, and models that are commercial best practices for wireless broadband networks.

(2) Implement controls to ensure that public safety priority and secure network access are limited to authorized public safety users and devices, and utilize an open standard protocol for authentication.

(3) Allow for public safety network authentication, authorization, automatic logoff, transmission secrecy and integrity, audit control capabilities, and other unique attributes.

(e) A mechanism to ensure Quality of Service (QoS) for public safety and to establish various levels of priority for public safety communications. The Upper 700 MHz D Block licensee shall not be obligated to implement this provision before appropriate standards are developed and appropriate hardware and

software are available on commercially reasonable terms. The Upper 700 MHz D Block Licensee and the Public Safety Broadband Licensee shall use reasonable efforts to work with applicable standards organizations, network equipment manufacturers, and other suppliers to accelerate the commercially reasonable availability of these features for the Shared Wireless Broadband Network. The Public Safety Broadband Licensee shall have authority to establish access priority and service levels, and authenticate and authorize public safety users. In addition, the following provisions for QoS shall be incorporated into the operational capabilities of the Shared Wireless Broadband Network.

(1) Priority shall be defined as Public Safety Broadband Licensee-approved user or class of users, network, application, and services priorities that, via user or class of users or device identification, or both, offer the highest assignable levels of priority for network access and use of network resources, services, and applications.

(2) The Shared Wireless Broadband Network shall provide emergency priority access pursuant to §27.1307(e).

(3) The Shared Wireless Broadband Network shall provide an appropriate priority to 9-1-1 calls.

(4) QoS resource reservation and session control mechanisms shall be incorporated into the operational capabilities of the Shared Wireless Broadband Network.

(5) QoS shall be considered to be the full class of mechanisms that are found at multiple IP layers in the network (both radio access network and core), and that provision and apply priority for IP packet based traffic.

(6) The assignment of network resources shall enable user or service priority, or both, in addition to the QoS requirements of the application.

(7) The Shared Wireless Broadband Network shall support multiple IP data services and application session flows between a user device and network, where each flow may have a different QoS requirement and priority level.

(8) If network resources are not available to meet a resource reservation request, the Shared Wireless Broadband Network shall have the ability to provide a new QoS consistent with the limited network resources.

(f) Operational capabilities to support public safety systems as specified below:

(1) The Shared Wireless Broadband Network shall provide access for all applications and services, hosted applications and services, and third party public safety applications and services specified in the Network Sharing Agreement. The Public Safety Broadband Licensee shall give consideration of particular applications to the overall impact on overall system performance.

(2) The Shared Wireless Broadband Network shall provide for the application data rates shown in Table 1.

(3) The Shared Wireless Broadband Network shall be designed to provide edge of cell data rates shown in Table 2. Typical data rates should be designed for at least 1 Mbs downlink and 600 kbps uplink. The data link speeds for public safety users must be at least as fast as the best data speeds provided to commercial users of the Shared Wireless Broadband Network.

(4) The Shared Wireless Broadband Network must provide indoor coverage for VoIP consistent with the propagation parameters shown in Table 3.

(5) For purposes of these Tables 2 and 3, the following definitions apply in terms of population per square mile: dense urban: 15,000 people or greater; urban 2,500 – 14,999; suburban 200-2499; and rural 0 – 199.

(6) The data rates in this section are design objectives and are not to be applied for a particular device, time or location.

(7) Signal coverage, propagation, and capacity parameters in Table 2 and 3 shall be reviewed by the Upper 700 MHz D Block licensee and the Public Safety Broadband Licensee no less than every four years to assess the impact of benefits from technology evolution and general improvement in network coverage consistent with paragraph (a)(2).

Table 1 to § 27.1305 — Applications and Services QoS Attributes

Application/Service	Description	Data Rate
File transfer	FTP and general data upload / download	Greater than 256kb/s
Email	Both Web based and Entity Hosted E-Mail Service	Less than 16kb/s
Web browsing	Intranet, extranet, and internet	Greater than 32kb/s
Mobile voice	Equivalent to current commercial mobile voice	Minimum 15 kb/s
Push to talk (PTT) voice	Commercial grade PTT / PoC offerings with group call, alerting, and monitoring capability.	4-25 kb/s
Indoor video	Video that is transmitted from inside a building	20-384 kb/sF
Outdoor video	Video that is transmitted from the street	32-384 kb/s
Location services	All location based services	Less than 16kb/s
Database transactions	Remote databases access both under the entities' direct control as well as databases that are local	Less than 32kb/s
Messaging	Instant messaging, SMS, and Push to X services	Less than 16kb/s
Network Operations data	Network operational and maintenance data including over the air programming and remote client management	Less than 32kb/s
Dispatch data	Data as it relates to computer aided dispatching.	Less than 64kb/s
Generic traffic	General category for traffic that does not fall within any of the categories described above, and that generates less than 64kb of data per second	Less than 64kb/s
Telemetry	Remote measurement and reporting of information for radio devices, vehicles, and sensor data	70-120 kb/s

Table 1 to § 27.1305 — Applications and Services QoS Attributes		
Application/Service	**Description**	**Data Rate**
Virtual Private Networking	Secure remote access to entity LAN and WAN environments	64 – 256 kb/s

Table 2 to § 27.1305 Data Propagation and Capacity Parameters				
Morphology	**Cell Coverage Area Reliability**	**Sector Loading Factor**	**Forward Link Throughput On-Street Single user Average Cell-edge**	**Reverse Link Throughput On-Street Single user Average Cell-edge**
Dense Urban	95%	70%	256 kbps	256 kbps
Urban	95%	70%	256 kbps	256 kbps
Suburban	95%	70%	128 kbps	128 kbps
Rural	95%	70%	128 kbps	128 kbps
Highway	95%	70%	64 kbps	64 kbps

Table 3 to § 27.1305 Voice Propagation and Capacity Parameters			
Morphology	**In-Building Penetration Margin**	**Cell Coverage Area Reliability**	**Sector Loading Factor**
Dense Urban	22 dB	95%	70%
Urban	19 dB	95%	70%
Suburban	13 dB	95%	70%
Rural	6 dB	95%	70%
Highway	6 dB	95%	70%

Section 27.1307 is amended by revising paragraph (d) and adding paragraph (e) to read as follows:

§ 27.1307 Spectrum use in the network.

* * * * *

(d) The Upper 700 MHz D Block licensee may construct and operate the Shared Wireless Broadband Network using both the 758-763 MHz and 788-793 MHz bands as well as the 763-768 MHz and 793-798 MHz bands as a combined resource. If the Upper 700 MHz D Block licensee chooses to operate the

spectrum as a combined resource, however, 50 percent of the capacity available from the combined 20 megahertz of spectrum must be assigned to public safety users and the other 50 percent must be assigned to the commercial users, consistent with the respective capacity and priority rights of the Upper 700 MHz D Block license and the Public Safety Broadband License and with rules in this Part.

(e) Emergency Priority Access.

(1) The Upper 700 MHz D Block licensee must provide public safety users priority access to, but not preemptive use of, up to 40 percent of the commercial spectrum capacity (two megahertz in each of the uplink and downlink blocks), assuming the full public safety broadband block spectrum capacity is being used, for an aggregate total of 14 megahertz of overall network capacity in the following circumstances:

(i) The President or a state governor declares a state of emergency.

(ii) The President or a state governor issues an evacuation order impacting areas of significant scope.

(iii) The national or airline sector threat level is set to red.

(2) The D Block licensee must provide priority access to, but not preemptive use of, up to 20 percent of the commercial spectrum capacity (one megahertz in each of the uplink and downlink blocks) in the following circumstances:

(i) The National Weather Service issues a hurricane or flood warning likely to impact a significant area.

(ii) The occurrence of other major natural disasters, such as tornado strikes, tsunamis, earthquakes, or pandemics.

(iii) The occurrence of manmade disasters or acts of terrorism of a substantial nature.

(iv) The occurrence of power outages of significant duration and scope.

(v) The national threat level is set to orange.

(3) The Upper 700 MHz D Block licensee must assign the next available channel to the requesting public safety user over a commercial user—i.e., the public safety user would be placed at the top of the queue—and should not preempt a commercial call in progress. Emergency priority access is limited to the time and geographic scope of the emergency.

(4) To trigger emergency priority access, the Public Safety Broadband Licensee must request, on behalf of the impacted public safety agencies, that the Upper 700 MHz D Block licensee provide such access. Emergency priority access requests initiated by the Public Safety Broadband Licensee will cover a 24-hour time period, and must be reinitiated by the Public Safety Broadband Licensee for each 24-hour time period thereafter that the priority access is required.

(5) In the event that the Upper 700 MHz D Block licensee and the Public Safety Broadband Licensee do not agree that an emergency has taken place, the Public Safety Broadband Licensee may request the Defense Commissioner to resolve the dispute.

10. Section 27.1310 is amended by revising paragraphs (c), (d), (f), (g), and (j), and adding paragraphs (k) through (n), to read as follows:

§ 27.1310 Network sharing agreement.

* * * * *

(c) The definition of "emergency" for purposes of emergency priority access, as described in Section 27.1307(e).

(d) All service fees to be imposed for services to public safety, including fees for normal network service, interconnected service, and fees for priority access to the D Block spectrum in an emergency.

* * * * *

(f) The right of the Public Safety Broadband Licensee to determine and approve the specifications of public safety equipment used on the network and the right to purchase its own subscriber equipment from any vendor it chooses, to the extent such specifications and equipment are consistent with reasonable network management requirements.

(g) The terms, conditions, and timeframes pursuant to which the Upper 700 MHz D Block licensee must make available at least one handset suitable for public safety use that includes an integrated satellite solution.

* * * * *

(j) To the extent that interoperability arrangements between the Upper 700 MHz D Block licensee and the Public Safety Broadband Licensee are required under §27.1305(a)(1), the terms and conditions of the arrangement, including the terms and conditions under which roaming will be provided to public safety users of other Shared Wireless Broadband Networks.

(k) The terms of a standard agreement under which public safety networks operating in other frequency bands may connect to the Shared Wireless Broadband Network pursuant to and in accordance with §27.1305(a)(1).

(l) Terms regarding the establishment of access priorities, service levels and related requirements, and approval of public safety applications and end user devices, by the Public Safety Broadband Licensee.

(m) A process for forecasting demand for public safety usage.

(n) A contract term, not to exceed a 15 year period that coincides with the terms of the Upper 700 MHz D Block license and the Public Safety Broadband License.

11. Section 27.1315 is amended by revising paragraphs (a), (b), (c), (f)(4), and (g) to read as follows:

§ 27.1315 Establishment, execution, and application of the network sharing agreement.

* * * * *

(a) Approval of NSA as pre-condition for granting the Upper 700 MHz D Block License. The Commission shall not grant an Upper 700 MHz D Block license until the winning bidder for the subject Upper 700 MHz D Block license has negotiated an NSA and such other agreements as the Commission may require or allow with the Public Safety Broadband Licensee, and the NSA and related agreements, or documents have been approved by the Commission and executed by the required parties. Parties to the NSA must also include the Upper 700 MHz D Block licensee, a Network Assets Holder, and an

Operating Company, as these entities are defined in § 27.4.

(b) Requirement of negotiation. Negotiation of an NSA between a winning bidder for an Upper 700 MHz D Block license and the Public Safety Broadband Licensee must commence by the date the winning bidder files its long form application or the date on which the Commission designates the Public Safety Broadband Licensee, whichever is later, and must conclude within six months of that date. Parties to this negotiation are required to negotiate in good faith. Two members of the Commission staff, one from the Wireless Telecommunications Bureau and one from the Public Safety and Homeland Security Bureau, shall be present at all stages of the negotiation as neutral observers.

(c) Reporting requirements. A winning bidder for the Upper 700 MHz D Block license must file a report with the Commission within 10 business days of the commencement of the negotiation period certifying that active and good faith negotiations have begun, providing the date on which they commenced, and providing a schedule of the initial dates on which the parties intend to meet for active negotiations, covering at a minimum the first 30-day period. Beginning three months from the triggering of the six-month negotiation period, the winning bidder for a Upper 700 MHz D Block license and the Public Safety Broadband Licensee must jointly provide detailed reports, on a monthly basis and subject to a request for confidential treatment, on the progress of the negotiations throughout the remainder of the negotiations. These reports must include descriptions of all material issues that the parties have yet to resolve.

* * * * *

(f) * * *

(4) Determining that no resolution of the disputed issues can be made consistent with the public interest.

(g) Lack of a Commission-approved NSA and such other agreements as the Commission may require or allow. If a winning bidder chooses not to execute a Commission-approved NSA or such other agreements as the Commission may require or allow within 10 business days of Commission approval, the winning bidder's long-form application will be dismissed, the winning bidder will be deemed to have defaulted under § 1.2109(c) of this chapter, and the winning bidder will be liable for the default payment specified in § 1.2104(g)(2) of this chapter and §27.501(b)(3) of this chapter. In all other circumstances in which the parties do not submit executed copies of a Commission-approved NSA and such other agreements within the time permitted by this section and the Commission does not dismiss the winning bidder's long-form application for reasons other than the lack of a Commission-approved NSA, the winning bidder's long-form application will be dismissed and any payments made toward the winning bid will be returned to the payor(s) of record.

12. Section 27.1330 is amended by revising paragraph (b) to read as follows:

§ 27.1330 Local public safety build-out and operation.

* * * * *

(b) Rights to early build-out in areas with a build-out commitment. In an area where the Upper 700 MHz D Block licensee has committed, in the NSA, to build out by a certain date, a public safety entity may, with the pre-approval of the Public Safety Broadband Licensee and the Upper 700 MHz D Block licensee, and subject to the requirements set forth herein, construct a broadband network in that area at its own expense so long as the network is capable of operating on the Shared Wireless Broadband Network and meets all the requirements and specifications of the network required under the NSA.

* * * * *

(4) Attribution of early build-out to applicable construction benchmarks. Upon completion of construction, transfer of ownership to the Upper 700 MHz D Block licensee, and compensation as required herein, if applicable, the Upper 700 MHz D Block licensee may include the network constructed pursuant to the early build-out provisions herein for purposes of determining whether it has met its build-out benchmarks and the build-out requirements of the NSA.

* * * * *

13. Section 27.1340 is amended by adding paragraph (c) as follows:

§ 27.1340 Reporting obligations.

* * * * *

(c) The Upper 700 MHz D Block licensee must provide regular monthly reports on network usage to the Public Safety Broadband Licensee.

PART 90 – PRIVATE LAND MOBILE RADIO SERVICES

14. The authority citation for part 90 continues to read as follows:

Authority: Sections 4(i), 11, 303(g), 303(r), and 332(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 161, 303(g), 303(r), and 332(c)(7) unless otherwise noted.

15. Section 90.7 is amended by adding the following definitions in alphabetical order to read as follows:

§90.7 Definitions.

* * * * *

Network Sharing Agreement (NSA). An agreement entered into between the winning bidder of an Upper 700 MHz D Block license, the Upper 700 MHz D Block licensee, the Network Assets Holder, the Operating Company, the Public Safety Broadband Licensee, and any other related entities that the Commission may require or allow regarding the shared wireless broadband network associated with that 700 MHz Public/Private Partnership that will operate on the 758-763 MHz and 788-793 MHz bands and the 763-768 MHz and 793-798 MHz bands.

* * * * *

Upper 700 MHz D Block license. The Upper 700 MHz D Block license authorizes services in the 758-763 MHz and 788-793 MHz bands.

* * * * *

16. Section 90.18 is revised to read as follows:

§ 90.18 Public Safety 700 MHz Nationwide Broadband Network.

The 763-768/793-798 MHz band is dedicated to a broadband public safety communications system with a nationwide level of interoperability. A nationwide license for this spectrum is held by a single entity, the Public Safety Broadband Licensee, which must enter into the 700 MHz Public/Private Partnership with

the Upper 700 MHz D Block licensee, pursuant to a Network Sharing Agreement and such other agreements as the Commission may require. The specific provisions relating to the 700 MHz Public/Private Partnership are set forth in subpart AA of this part and subpart N of Part 27. The Public Safety 700 MHz Nationwide Broadband Network is established in PS Docket No. 06-229.

17. Section 90.523 is revised to read as follows:

§ 90.523 Eligibility.

This section implements the definition of public safety services contained in 47 U.S.C. 337(f)(1).

(a) Public Safety Narrowband Spectrum Eligibility Criteria. The eligibility criteria to hold Commission authorizations to deploy and operate systems in the 769-775 MHz and 799-805 MHz (public safety narrowband) frequency bands are as follows:

(1) Public Safety Services. Authorizations to deploy and operate systems in the 769-775 MHz and 799-805 MHz frequency bands are limited to services the sole or principal use of which is to protect the safety of life, health, or property, and which are not made commercially available to the public by the license holder. Public Safety Services may be provided either by:

(i) State or Local Government Entities, including any territory, possession, state, city, county, town, or similar State or local governmental entity, or

(ii) Nongovernmental Organizations (NGO) that are authorized by a state or local government entity whose primary mission is the provision of Public Safety Services, provided that the NGO:

(A) Has the ongoing authorization of a state or local governmental entity whose mission is the provision of Public Safety Services;

(B) Operates such authorized system consistent with the limitations in subsection (a)(1); and

(C) Submits with its applications a written certification of support by the state or local governmental entity referenced in subparagraph (a)(1)(ii)(A) of this section.

(2) NGOs assume all risks associated with operating under the conditions specified in subsection (a)(1)(ii). Authorizations issued to NGOs to operate systems in the 769-775 MHz and 799-805 MHz frequency bands include the following condition: If at any time the authorizing governmental entity notifies the Commission in writing of such governmental entity's termination of its authorization of a NGO's operation of a system in the 769-775 MHz and 799-805 MHz frequency bands, the NGO's authorization shall terminate automatically.

(b) Public Safety Broadband Spectrum Use Eligibility Criteria. Only entities that meet the public safety narrowband spectrum eligibility criteria in paragraph (a) of this section, shall be eligible to access the Shared Wireless Broadband Network, operating in the 763-768 MHz and 793-798 MHz (public safety broadband) frequency bands, under the authorization of the Public Safety Broadband Licensee, in accordance with the terms of the Network Sharing Agreement governing the use of this network.

(c) Public Safety Broadband License Eligibility Criteria. The minimum eligibility requirements to hold the Public Safety Broadband License covering the 763-768 MHz and 793-798 MHz public safety broadband frequency bands are as follows:

(1) No commercial interest may be held in the Public Safety Broadband Licensee, and no commercial interest may participate in the management of the Public Safety Broadband Licensee.

(2) The Public Safety Broadband Licensee must be a non-profit organization.

(3) The Public Safety Broadband Licensee must be as broadly representative of the public safety radio user community as possible.

(4) The Public Safety Broadband Licensee must be in receipt of written certifications from no less than ten geographically diverse state and local governmental entities (the authorizing entities), with at least one certification from a state government entity and one from a local government entity, verifying that:

(i) They have authorized the Public Safety Broadband Licensee to use spectrum at 763-768 MHz and 793-798 MHz to provide the authorizing entities with public safety services; and

(ii) The authorizing entities' primary mission is the provision of public safety services.

(5) The sole or principal purpose of the services provided under the Public Safety Broadband Licensee's authorization must be to protect the safety of life, health, or property. These services must comply with the terms of the Network Sharing Agreement(s) and must not be made commercially available to the public.

18. Section 90.528 is amended by revising paragraph (d) and adding new paragraphs (h) and (i) to read as follows:

§ 90.528 Public Safety Broadband License.

* * * * *

(d) The term of the Public Safety Broadband License shall not exceed fifteen years from the date upon which the first D Block license is granted. The Public Safety Broadband Licensee is entitled to a renewal expectancy barring violations of law, rules or policy warranting denial of renewal.

* * * * *

(h) Annual Budgeting Process. The Public Safety Broadband Licensee shall establish an audited annual budgeting process, conducted by an external, independent auditor. Such audited budget shall be submitted to the Commission and presented at an open meeting of the Board of Directors. The Chief, Public Safety and Homeland Security Bureau, may request an audit of the Public Safety Broadband Licensee's expenses at any time.

(i) Proposed Annual Budget. As part of its annual budgeting process, the Public Safety Broadband Licensee shall submit for approval to the Chief, Public Safety and Homeland Security Bureau, and Chief, Wireless Telecommunications Bureau its proposed budget for each such upcoming fiscal year.

19. Section 90.1403 is amended by revising paragraphs (a) and (b) to read as follows:

§ 90.1403 Public Safety Broadband License conditions.

(a) The Public Safety Broadband Licensee shall comply with all of the applicable requirements set forth in this subpart and shall comply with the terms of the Network Sharing Agreement(s) and such other agreements as the Commission may require or allow.

(b) The responsibilities of the Public Safety Broadband Licensee shall include the following:

(1) Negotiation of the NSA and such other agreements as the Commission may require or allow with the winning bidder at auction for a Upper 700 MHz Band D Block license, pursuant to the requirements set forth in § 90.1410.

(2) General administration of access to the 763-768 MHz and 793-798 MHz bands by individual public safety entities, as facilitated through the establishment of priority access, service levels and related requirements within the NSA process, approving public safety applications and end user devices, and related frequency coordination duties.

(3) Regular interaction with and promotion of the needs of the public safety entities with respect to access and use of the 763-768 MHz and 793-798 MHz bands, within the technical and operational confines of the governing NSA.

(4) Dealings with equipment vendors on its own or in partnership with the Upper 700 MHz D Block licensee, as appropriate, to achieve and pass on the benefits of economies of scale concerning network and subscriber equipment and applications.

(5) Sole authority, which cannot be waived in the NSA(s), to approve, in consultation with the Upper 700 MHz D Block licensee, equipment and applications for use by public safety entities on the public safety broadband network. State or local entities may seek review of a decision by the Public Safety Broadband Licensee not to permit certain equipment or applications, or particular specifications for equipment or applications, from the Chief, Public Safety and Homeland Security Bureau.

* * * * *

(8) Exercise of sole discretion, pursuant to § 2.103 of this chapter, whether to permit Federal public safety agency use of the public safety broadband spectrum, with any such use subject to the terms and conditions of the governing NSA.

(9) Review of requests for early construction and operation of local public safety broadband networks on the 700 MHz public safety broadband spectrum in areas with and without a preexisting build-out commitment in the applicable NSA, pursuant to the procedures and requirements outlined for such waivers as described in § 90.1430.

(10) Review of requests for waiver submitted by public safety entities to conduct wideband operations pursuant to the procedures and restrictions in connection with such waivers as described in § 90.1432.

20. Section 90.1405 is revised to read as follows:

§ 90.1405 Shared wireless broadband network.

The Shared Wireless Broadband Network developed by the 700 MHz Public/Private Partnership must be designed to meet requirements associated with an interoperable, nationwide public safety broadband network as specified in this section. All specified mandatory requirements as defined in this section must be incorporated in the Network Sharing Agreement, and shall be used in the determination of compliance under §27.14(p) of this chapter. The Public Safety Broadband Licensee and the Upper 700 MHz D Block licensee may add any capabilities or features beyond those in these rules based on mutually agreeable terms under the Network Sharing Agreement. The Shared Wireless Broadband Network shall incorporate

the following:

(a) A design for public safety operations over a broadband IP-based technology platform that (i) utilizes standardized commercial technology, (ii) provides fixed and mobile voice, video, and data capability that is interoperable across public safety local and state agencies, jurisdictions, and geographic areas, and (iii) includes current and evolving state-of-the-art technologies reasonably made available in the commercial marketplace with features beneficial to the public safety community.

(1) Such a design shall provide a nationwide common radio access network air interface to enable the Shared Wireless Broadband Network to support nationwide level interoperability. The common air interface shall allow migration to future technology upgrades. In the case of regional Upper 700 MHz D Block licensees, the common radio access network air interface will be determined via the auction process and each regional Upper 700 MHz D Block licensee will be required to enter into arrangements both with other regional Upper 700 MHz D Block licensees and with the Public Safety Broadband Licensee as necessary to ensure interoperability between their networks. Such arrangements must provide, at a minimum, that each regional Upper 700 MHz D Block licensee will provide the ability to roam on its network to public safety users of all other Shared Wireless Broadband Networks. Regional Upper 700 MHz D Block licensees are not permitted to assess special roaming charges (over and above service fees charged for in-region use) in cases where public safety users require roaming for mutual aid or emergencies.

(2) The technology selected for the Shared Wireless Broadband Network shall be permitted to evolve based on commercial wireless upgrade timeframes, except that future upgrades shall include user equipment backward compatibility, as supported by commercial product availability and specified in the technology standards, to allow for commercially reasonable transition periods for public safety entities' user equipment. The notification and impact management processes relating to technology upgrades, and migration to such upgrades, shall be defined and agreed to in the Network Sharing Agreement.

(3) To promote interoperability between the Shared Wireless Broadband Network and voice-based public safety networks in other frequency bands, the Upper 700 MHz D Block licensee will publish IP-based specifications describing how such other public safety networks may access the Upper 700 MHz D Block licensee's Shared Wireless Broadband Network via bridges and/or gateways. The Upper 700 MHz D Block licensee shall charge these other public safety networks for such access no more than the relevant fee established or approved by the Commission. Public safety users shall bear the costs of the bridges and gateways, including installation and maintenance costs.

(4) The Shared Wireless Broadband Network shall support a Voice over Internet Protocol (VoIP) capability to complement existing public safety mission critical voice communication systems. The VoIP capability shall allow interconnection with the Public Switched Telephone Network as well as with other public safety VoIP users on the network. VoIP features will include but not be limited to Push-To-Talk.

(b) Availability, robustness, and hardening requirements as follows:

(1) The Shared Wireless Broadband Network shall provide 99.6 percent network availability for all terrestrial elements of operation in the coverage areas certified pursuant to §27.14(o)(1) of this chapter, calculated over each license area annually, starting four years after license issuance. The Upper 700 MHz D Block licensee shall use commercially reasonable efforts to provide network availability above this requirement, with the target of 99.9 percent network availability.

(2) The method for measuring availability shall be defined in the Network Sharing Agreement, which shall (i) be a measure of infrastructure availability as measured from the cell site radio antenna through

and across the core network; (ii) exclude radio signal coverage and scheduled maintenance downtime with prior notice to the Public Safety Broadband Licensee; (iii) exclude outages caused by actions or events outside the reasonable control of the Upper 700 MHz D Block licensee; and (iv) exclude outages only affecting limited applications.

(3) The Shared Wireless Broadband Network design specifications shall include commercial best practices, such as Network Reliability and Interoperability Council best practices, that take into consideration local influencing factors such as weather, geology, and building codes on network attributes such as hardening of transmission facilities and antenna towers, extended backup power, seismic safety standards, and accommodations for wind, ice, and other natural phenomenon.

(4) The Upper 700 MHz D Block licensee and the Public Safety Broadband Licensee, in consultation with the relevant community, shall jointly designate "critical" sites. The designation of sites as "critical" shall not be required to cover more than 35 percent of the Shared Wireless Broadband Network sites for the Upper 700 MHz D Block license; however, the Upper 700 MHz D Block licensee shall use commercially reasonable efforts to designate as "critical" additional sites requested by the Public Safety Broadband Licensee, up to 50 percent of all the licensee's sites. Sites designated as "critical" shall have battery backup power of 8 hours, and shall have generators with a fuel supply sufficient to operate the generators for at least 48 hours. The Upper 700 MHz D Block licensee shall make commercially reasonable efforts to provide a fuel supply at "critical" sites above this requirement sufficient for a minimum of 5 days. The Upper 700 MHz D Block licensee and the Public Safety Broadband Licensee, in consultation with the relevant community, shall jointly determine the sites that will require redundant backhaul in order to comply with the network availability requirements in this section.

(5) The Upper 700 MHz D Block Licensee and the Public Safety Broadband Licensee may agree on other methods to improve network resiliency in lieu of designating "critical" cell sites as described in paragraph (4) of this subsection. These may include deployment of mobile assets or the use of satellite facilities.

(c) A capability incorporated into the Shared Wireless Broadband Network infrastructure to provide monthly usage reports covering network capacity and priority access so that the Public Safety Broadband Licensee can monitor usage and provide appropriate feedback to the Upper 700 MHz D Block licensee on operational elements of the network.

(d) Security and encryption consistent with commercial best practices. For purposes of complying with this paragraph, the Upper 700 MHz D Block licensee shall:

(1) Comply with U.S. government standards, guidelines, and models that are commercial best practices for wireless broadband networks.

(2) Implement controls to ensure that public safety priority and secure network access are limited to authorized public safety users and devices, and utilize an open standard protocol for authentication.

(3) Allow for public safety network authentication, authorization, automatic logoff, transmission secrecy and integrity, audit control capabilities, and other unique attributes.

(e) A mechanism to ensure Quality of Service (QoS) for public safety and to establish various levels of priority for public safety communications. The Upper 700 MHz D Block licensee shall not be obligated to implement this provision before appropriate standards are developed and appropriate hardware and software are available on commercially reasonable terms. The Upper 700 MHz D Block Licensee and the Public Safety Broadband Licensee shall use reasonable efforts to work with applicable standards organizations, network equipment manufacturers, and other suppliers to accelerate the commercially

reasonable availability of these features for the Shared Wireless Broadband Network. The Public Safety Broadband Licensee shall have authority to establish access priority and service levels, and authenticate and authorize public safety users. In addition, the following provisions for QoS shall be incorporated into the operational capabilities of the Shared Wireless Broadband Network.

(1) Priority shall be defined as Public Safety Broadband Licensee-approved user or class of users, network, application, and services priorities that, via user or class of users or device identification, or both, offer the highest assignable levels of priority for network access and use of network resources, services, and applications.

(2) The Shared Wireless Broadband Network shall provide emergency priority access pursuant to §90.1407(e).

(3) The Shared Wireless Broadband Network shall provide an appropriate priority to 9-1-1 calls.

(4) QoS resource reservation and session control mechanisms shall be incorporated into the operational capabilities of the Shared Wireless Broadband Network.

(5) QoS shall be considered to be the full class of mechanisms that are found at multiple IP layers in the network (both radio access network and core), and that provision and apply priority for IP packet based traffic.

(6) The assignment of network resources shall enable user or service priority, or both, in addition to the QoS requirements of the application.

(7) The Shared Wireless Broadband Network shall support multiple IP data services and application session flows between a user device and network, where each flow may have a different QoS requirement and priority level.

(8) If network resources are not available to meet a resource reservation request, the Shared Wireless Broadband Network shall have the ability to provide a new QoS consistent with the limited network resources.

(f) Operational capabilities to support public safety systems as specified below:

(1) The Shared Wireless Broadband Network shall provide access for all applications and services, hosted applications and services, and third party public safety applications and services specified in the Network Sharing Agreement. The Public Safety Broadband Licensee shall give consideration of particular applications to the overall impact on overall system performance.

(2) The Shared Wireless Broadband Network shall provide for the application data rates shown in Table 1.

(3) The Shared Wireless Broadband Network shall be designed to provide edge of cell data rates shown in Table 2. Typical data rates should be designed for at least 1 Mbs downlink and 600 kbps uplink. The data link speeds for public safety users must be at least as fast as the best data speeds provided to commercial users of the Shared Wireless Broadband Network.

(4) The Shared Wireless Broadband Network must provide indoor coverage for VoIP consistent with the propagation parameters shown in Table 3.

(5) For purposes of these Tables 2 and 3, the following definitions apply in terms of population per square mile: dense urban: 15,000 people or greater; urban 2,500 – 14,999; suburban 200-2499; and rural 0 – 199.

(6) The data rates in this section are design objectives and are not to be applied for a particular device, time or location.

(7) Signal coverage, propagation, and capacity parameters in Table 2 and 3 shall be reviewed by the Upper 700 MHz D Block licensee and the Public Safety Broadband Licensee no less than every four years to assess the impact of benefits from technology evolution and general improvement in network coverage consistent with paragraph (a)(2).

Table 1 to § 90.1405 — Applications and Services QoS Attributes

Application/Service	Description	Data Rate
File transfer	FTP and general data upload / download	Greater than 256kb/s
Email	Both Web based and Entity Hosted E-Mail Service	Less than 16kb/s
Web browsing	Intranet, extranet, and internet	Greater than 32kb/s
Mobile voice	Equivalent to current commercial mobile voice	Minimum 15 kb/s
Push to talk (PTT) voice	Commercial grade PTT / PoC offerings with group call, alerting, and monitoring capability.	4-25 kb/s
Indoor video	Video that is transmitted from inside a building	20-384 kb/sF
Outdoor video	Video that is transmitted from the street	32-384 kb/s
Location services	All location based services	Less than 16kb/s
Database transactions	Remote databases access both under the entities' direct control as well as databases that are local	Less than 32kb/s
Messaging	Instant messaging, SMS, and Push to X services	Less than 16kb/s
Network Operations data	Network operational and maintenance data including over the air programming and remote client management	Less than 32kb/s
Dispatch data	Data as it relates to computer aided dispatching.	Less than 64kb/s
Generic traffic	General category for traffic that does not fall within any of the categories described above, and that generates less than 64kb of data per second	Less than 64kb/s
Telemetry	Remote measurement and reporting of information for radio devices, vehicles, and sensor data	70-120 kb/s
Virtual Private Networking	Secure remote access to entity LAN and WAN environments	64 – 256 kb/s

Table 2 to § 90.1405
Data Propagation and Capacity Parameters

Morphology	Cell Coverage Area Reliability	Sector Loading Factor	Forward Link Throughput On-Street Single user Average Cell-edge	Reverse Link Throughput On-Street Single user Average Cell-edge
Dense Urban	95%	70%	256 kbps	256 kbps
Urban	95%	70%	256 kbps	256 kbps
Suburban	95%	70%	128 kbps	128 kbps
Rural	95%	70%	128 kbps	128 kbps
Highway	95%	70%	64 kbps	64 kbps

Table 3 to § 90.1405
Voice Propagation and Capacity Parameters

Morphology	In-Building Penetration Margin	Cell Coverage Area Reliability	Sector Loading Factor
Dense Urban	22 dB	95%	70%
Urban	19 dB	95%	70%
Suburban	13 dB	95%	70%
Rural	6 dB	95%	70%
Highway	6 dB	95%	70%

Section 90.1407 is amended by revising paragraph (d) and adding paragraph (e) to read as follows:

§ 90.1407 Spectrum use in the network.

* * * * *

(d) The Upper 700 MHz D Block licensee may construct and operate the Shared Wireless Broadband Network using both the 758-763 MHz and 788-793 MHz bands as well as the 763-768 MHz and 793-798 MHz bands as a combined resource. If the Upper 700 MHz D Block licensee chooses to operate the spectrum as a combined resource, however, 50 percent of the capacity available from the combined 20 megahertz of spectrum must be assigned to public safety users and the other 50 percent must be assigned to the commercial users, consistent with the respective capacity and priority rights of the Upper 700 MHz D Block license and the Public Safety Broadband License and with rules in this Part.

(e) Emergency Priority Access.

(1) The Upper 700 MHz D Block licensee must provide public safety users priority access to, but not

preemptive use of, up to 40 percent of the commercial spectrum capacity (two megahertz in each of the uplink and downlink blocks), assuming the full public safety broadband block spectrum capacity is being used, for an aggregate total of 14 megahertz of overall network capacity in the following circumstances:

(i) The President or a state governor declares a state of emergency.

(ii) The President or a state governor issues an evacuation order impacting areas of significant scope.

(iii) The national or airline sector threat level is set to red.

(2) The D Block licensee must provide priority access to, but not preemptive use of, up to 20 percent of the commercial spectrum capacity (one megahertz in each of the uplink and downlink blocks) in the following circumstances:

(i) The National Weather Service issues a hurricane or flood warning likely to impact a significant area.

(ii) The occurrence of other major natural disasters, such as tornado strikes, tsunamis, earthquakes, or pandemics.

(iii) The occurrence of manmade disasters or acts of terrorism of a substantial nature.

(iv) The occurrence of power outages of significant duration and scope.

(v) The national threat level is set to orange.

(3) The Upper 700 MHz D Block licensee must assign the next available channel to the requesting public safety user over a commercial user—i.e., the public safety user would be placed at the top of the queue—and should not preempt a commercial call in progress. Emergency priority access is limited to the time and geographic scope of the emergency.

(4) To trigger emergency priority access, the Public Safety Broadband Licensee must request, on behalf of the impacted public safety agencies, that the Upper 700 MHz D Block licensee provide such access. Emergency priority access requests initiated by the Public Safety Broadband Licensee will cover a 24-hour time period, and must be reinitiated by the Public Safety Broadband Licensee for each 24-hour time period thereafter that the priority access is required.

(5) In the event that the Upper 700 MHz D Block licensee and the Public Safety Broadband Licensee do not agree that an emergency has taken place, the Public Safety Broadband Licensee may request the Defense Commissioner to resolve the dispute.

21. Section 90.1410 is amended by revising paragraphs (c), (d), (f), (g), and (j), and adding paragraphs

(k) through (n), to read as follows:

§ 90.1410 Network sharing agreement.

* * * * *

(c) The definition of "emergency" for purposes of emergency priority access, as described in Section 90.1407(e).

(d) All service fees to be imposed for services to public safety, including fees for normal network service, interconnected service, and fees for priority access to the D Block spectrum in an emergency.

* * * * *

(f) The right of the Public Safety Broadband Licensee to determine and approve the specifications of public safety equipment used on the network and the right to purchase its own subscriber equipment from any vendor it chooses, to the extent such specifications and equipment are consistent with reasonable network management requirements.

(g) The terms, conditions, and timeframes pursuant to which the Upper 700 MHz D Block licensee must make available at least one handset suitable for public safety use that includes an integrated satellite solution.

* * * * *

(j) To the extent that interoperability arrangements between the Upper 700 MHz D Block licensee and the Public Safety Broadband Licensee are required under §90.1405(a)(1), the terms and conditions of the arrangement, including the terms and conditions under which roaming will be provided to public safety users of other Shared Wireless Broadband Networks.

(k) The terms of a standard agreement under which public safety networks operating in other frequency bands may connect to the Shared Wireless Broadband Network pursuant to and in accordance with §90.1405(a)(1).

(l) Terms regarding the establishment of access priorities, service levels and related requirements, and approval of public safety applications and end user devices, by the Public Safety Broadband Licensee.

(m) A process for forecasting demand for public safety usage.

(n) A contract term, not to exceed a 15 year period that coincides with the terms of the Upper 700 MHz D Block license and the Public Safety Broadband License.

22. Section 90.1415 is amended by revising paragraphs (a), (b), (c), (f)(4), and (g) to read as follows:

§ 90.1415 Establishment, execution, and application of the network sharing agreement.

* * * * *

(a) Approval of NSA as pre-condition for granting the Upper 700 MHz D Block License. The Commission shall not grant an Upper 700 MHz D Block license until the winning bidder for the subject Upper 700 MHz D Block license has negotiated an NSA and such other agreements as the Commission may require or allow with the Public Safety Broadband Licensee, and the NSA and related agreements, or documents have been approved by the Commission and executed by the required parties. Parties to the NSA must also include the Upper 700 MHz D Block licensee, a Network Assets Holder, and an Operating Company, as these entities are defined in § 27.4.

(b) Requirement of negotiation. Negotiation of an NSA between a winning bidder for an Upper 700 MHz D Block license and the Public Safety Broadband Licensee must commence by the date the winning bidder files its long form application or the date on which the Commission designates the Public Safety Broadband Licensee, whichever is later, and must conclude within six months of that date. Parties to this negotiation are required to negotiate in good faith. Two members of the Commission staff, one from the

Wireless Telecommunications Bureau and one from the Public Safety and Homeland Security Bureau, shall be present at all stages of the negotiation as neutral observers.

(c) Reporting requirements. A winning bidder for the Upper 700 MHz D Block license must file a report with the Commission within 10 business days of the commencement of the negotiation period certifying that active and good faith negotiations have begun, providing the date on which they commenced, and providing a schedule of the initial dates on which the parties intend to meet for active negotiations, covering at a minimum the first 30-day period. Beginning three months from the triggering of the six-month negotiation period, the winning bidder for a Upper 700 MHz D Block license and the Public Safety Broadband Licensee must jointly provide detailed reports, on a monthly basis and subject to a request for confidential treatment, on the progress of the negotiations throughout the remainder of the negotiations. These reports must include descriptions of all material issues that the parties have yet to resolve.

* * * * *

(f) * * *

(4) Determining that no resolution of the disputed issues can be made consistent with the public interest.

(g) Lack of a Commission-approved NSA and such other agreements as the Commission may require or allow. If a winning bidder chooses not to execute a Commission-approved NSA or such other agreements as the Commission may require or allow within 10 business days of Commission approval, the winning bidder's long-form application will be dismissed, the winning bidder will be deemed to have defaulted under § 1.2109(c) of this chapter, and the winning bidder will be liable for the default payment specified in § 1.2104(g)(2) of this chapter and §27.501(b)(3) of this chapter. In all other circumstances in which the parties do not submit executed copies of a Commission-approved NSA and such other agreements within the time permitted by this section, the winning bidder's long-form application will be dismissed and any payments made toward the winning bid will be returned to the payor(s) of record.

23. Section 90.1430 is amended by revising paragraph (b) to read as follows:

§ 90.1430 Local public safety build-out and operation.

* * * * *

(b) Rights to early build-out in areas with a build-out commitment. In an area where the Upper 700 MHz D Block licensee has committed, in the NSA, to build out by a certain date, a public safety entity may, with the pre-approval of the Public Safety Broadband Licensee and the Upper 700 MHz D Block licensee, and subject to the requirements set forth herein, construct a broadband network in that area at its own expense so long as the network is capable of operating on the Shared Wireless Broadband Network and meets all the requirements and specifications of the network required under the NSA.

* * * * *

(4) Attribution of early build-out to applicable construction benchmarks. Upon completion of construction, transfer of ownership to the Upper 700 MHz D Block licensee, and compensation as required herein, if applicable, the Upper 700 MHz D Block licensee may include the network constructed pursuant to the early build-out provisions herein for purposes of determining whether it has met its build-out benchmarks and the build-out requirements of the NSA.

* * * * *

24. Section 90.1440 is revised by adding paragraph (c) as follows:

§ 90.1440 Reporting obligations.

* * * * *

(c) The Upper 700 MHz D Block licensee must provide regular monthly reports on network usage to the Public Safety Broadband Licensee.

APPENDIX D

Relocation Costs By 700 MHz RPC Region

REGION	AMOUNT
Region 3 (Arizona)	1,610,100.00
Region 4 (Arkansas)	1,124,900.00
Region 7 (Colorado)	2,276,800.00
Region 11 (Hawaii)	53,000.00
Region 12 (Idaho)	723,200.00
Region 13 (Illinois)[981]	2,885,800.00
Region 17 (Kentucky)	2,472,600.00
Region 18 (Louisiana)	3,979,700.00
Region 19 (New England)[982]	414,400.00
Region 22 (Minnesota)	186,000.00
Region 23 (Mississippi)	401,000.00
Region 24 (Missouri)	244,100.00
Region 26 (Nebraska)	366,400.00
Region 27 (Nevada)	783,000.00
Region 30 (New York-Albany)[983]	78,100.00
Region 31 (North Carolina)	826,200.00
Region 33 (Ohio)	3,893,000.00
Region 35 (Oregon)	7,200.00
Region 39 (Tennessee)	231,100.00
Region 41 (Utah)	204,100.00
Region 42 (Virginia)[984]	2,614,800.00
Region 43 (Washington)	209,700.00
Region 49 (Texas-Austin)	63,800.00
Region 51 (Texas-Houston)	1,034,600.00
TOTAL RELOCATION COSTS:	**$26,683,600.00**

[981] Illinois' narrowband certification for Region 13 also includes narrowband facilities in Region 54 (Chicago Metro area).

[982] Region 19 (New England) includes six states: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.

[983] New York's narrowband certification for Region 30 also includes narrowband facilities in Region 55 (New York – Buffalo) and Region 8 (New York City Metro area).

[984] Virginia's narrowband certification for Region 42 also includes narrowband facilities in Region 20 (Northern Virginia/DC Metro).

APPENDIX E

NSA Term Sheet

Draft Network Sharing Agreement (NSA) Term Sheet
Public/Private Partnership

The following terms are to be incorporated into all Network Sharing Agreements between each D Block licensee and the Public Safety Broadband Licensee, to effectuate the 700 MHz public/private partnership.

Term of Agreement

- The term of the Network Sharing Agreement is 15 years. Extension of the term of the NSA or amendments to any of the major terms must be submitted to the Federal Communications Commission for approval.

Spectrum Use

The D Block licensee(s) must provide public safety users with primary access to 10 megahertz of spectrum capacity at all times.

During Emergencies

- The D Block licensee must provide public safety users emergency access to the D Block commercial capacity only in the event of an "emergency," which is defined as follows:
    - The declaration of a state of emergency by the President or a state governor.
    - The issuance of an evacuation order by the President or a state governor impacting areas of significant scope.
    - The issuance by the National Weather Service of a hurricane or flood warning likely to impact a significant area.
    - The occurrence of other major natural disasters, such as tornado strikes, tsunamis, earthquakes, or pandemics.
    - The occurrence of manmade disasters or acts of terrorism of a substantial nature.
    - The occurrence of power outages of significant duration and scope.
    - The elevation of the national threat level to either orange or red for any portion of the United States, or the elevation of the threat level in the airline sector or any portion thereof, to red.
- The D Block licensee(s) must provide public safety users priority access to, but not preemptive use of, up to 40 percent of the commercial D Block spectrum capacity (*i.e.*, 2 megahertz in each of the uplink and downlink blocks), assuming the full public safety broadband block spectrum capacity is being used, for an aggregate total of 14 megahertz of overall network capacity in the following circumstances: the President or a state governor declares a state of emergency; the President or a state governor issues an evacuation order impacting areas of significant scope; or the national or airline sector threat is set to red. In these circumstances, the D Block licensee(s) must assign the next available channel to the requesting public safety user over a commercial user—*i.e.*, the public safety user would be placed at the top of the queue—and would not preempt a commercial call in progress. The right to priority access must be limited to the time and geographic scope of the emergency.
- The D Block licensee(s) must provide priority access to, but not preemptive use of, up to 20 percent of the commercial spectrum capacity (*i.e.*, 1 megahertz in each of the uplink and

downlink blocks) in the following circumstances: the issuance by the National Weather Service of a hurricane or flood warning likely to impact a significant area; the occurrence of other major natural disasters, such as tornado strikes, tsunamis, earthquakes, or pandemics; the occurrence of manmade disasters or acts of terrorism of a substantial nature; the occurrence of power outages of significant duration and scope; or the elevation of the national threat level to orange for any portion of the United States. The right to priority access must be limited to the time and geographic scope of the emergency.

- To trigger priority access, the PSBL must request, on behalf of the impacted public safety agencies, that the D Block licensee provide such access. Priority access requests initiated by the PSBL will cover a 24-hour time period, and must be reinitiated by the PSBL for each 24-hour time period thereafter that the priority access is required.
- In the event that the D Block licensee and the PSBL do not agree that an emergency has taken place, the PSBL may ask the Defense Commissioner to resolve the dispute.

Performance Requirements

- D Block licensee(s) are required to provide signal coverage and offer service to at least 40 percent of the population in each PSR by the end of the fourth year, and 75 percent by the end of the tenth year. D Block licensee(s) will be required to meet the following final benchmarks 15 years after the issuance of their license(s):
    - PSRs with a population density less than 100 people per square mile, the licensee(s) will be required to provide signal coverage and offer service to at least 90 percent of the population by the end of the fifteenth year;
    - PSRs with a population density equal to or greater than 100 people per square mile and less than 500 people per square mile, the licensee(s) will be required to provide signal coverage and offer service to at least 94 percent of the population by the end of the fifteenth year; and
    - PSRs with a population density equal to or greater than 500 people per square mile, the licensee(s) will be required to provide signal coverage and offer service to at least 98 percent of the population by the end of the fifteenth year.

- These population coverage requirements must be met on a PSR basis, and licensees will have to use the most recently available U.S. Census data at the time of measurement to meet the requirements.

- To the extent that the D Block licensee chooses to provide terrestrial commercial services to population levels in excess of the relevant benchmarks, the D Block licensee must make the same level of coverage and service available to public safety entities.

- In addition to the required population benchmarks, D Block licensee(s) must provide service to major highways, interstates, and incorporated communities with populations greater than 3,000 no later than the end of the D Block license term. To the extent that coverage of major highways, interstates and incorporated communities with populations in excess of 3,000 requires the D Block licensee to extend coverage beyond what is required to meet its population benchmarks, coverage can be provided through non-terrestrial means, such as MSS or other such technologies.

- The D Block licensee and the Public Safety Broadband Licensee must reach agreement on a detailed build-out schedule that is consistent with the performance benchmarks. The build-out schedule must identify the specific areas of the country that will be built out and the extent to which interstates within the D Block licensee's service area will be covered by each of the performance deadlines. The D Block licensee may determine, in consultation with the Public

Safety Broadband Licensee, which particular areas of the country will be built out by each deadline.

- The D Block licensee may modify its population-based construction benchmarks where the D Block licensee and the Public Safety Broadband Licensee reach agreement and the Commission gives its prior approval for a modification. No increase in the performance requirements will be permitted unless it is acceptable to the D Block licensee.

- For the D Block licensee for the Gulf of Mexico, the population-based benchmarks shall be inapplicable, and the D Block licensee for the Gulf of Mexico and the Public Safety Broadband Licensee may flexibly negotiate a coverage and service plan for public safety use for that region as needed.

Role and Responsibilities of the D Block Licensee

- The D Block licensee has exclusive responsibility for all traditional network service provider operations, including customer acquisition, network monitoring and management, operational support and billing systems, and customer care, in connection with services provided to public safety users.

- The D Block licensee is subject to monthly network usage reporting requirements that will enable monitoring of its operations by the Commission and the PSBL.

- The D Block Licensee will allow the Public Safety Broadband Licensee to determine and approve the specifications of public safety equipment used on the network. The public safety subscribers will have right to purchase their own subscriber equipments and applications from any vendor they choose, to the extent such specifications, equipments, and applications are consistent with reasonable network management requirements and compatible with the network.

- If the D Block licensee chooses to adopt a wholesale-only model with respect to the D Block spectrum, it must ensure, though arrangements such as the creation of a subsidiary or by contracting with a third party, that retail service will be provided to public safety entities that complies with the Commission's regulatory requirements. This arrangement to provide service to public safety should be made part of the NSA.

Role and Responsibilities of the Public Safety Broadband Licensee

The Public Safety Broadband Licensee's assigned duties will be as follows:

- General administration of access to the 763-768 MHz and 793-798 MHz bands by individual public safety entities, as facilitated through the establishment of priority access, service levels and related requirements negotiated into the NSA, approving public safety applications and end user devices, and related frequency coordination duties.

- Regular interaction with and promotion of the needs of the public safety entities with respect to accessing and use of the national public safety broadband network, within the technical and operational confines of the NSA.

- Interfacing with equipment vendors on its own or in partnership with the D Block licensee, as appropriate, to achieve and pass on the benefits of economies of scale concerning network and subscriber equipment and applications.

- Sole authority, which cannot be waived in the NSA, to approve, in consultation with the D Block licensee, equipment and applications for use by public safety entities on the public safety broadband network.

- Responsibility to establish a means to authorize and authenticate public safety users. The Public Safety Broadband Licensee may accomplish this by establishing its own system that would accomplish these functions or defining parameters that are compatible with commercial technology and can be easily implemented by the D Block Licensee.

- Responsibility to facilitate negotiations between the D Block license winner and local and state entities to build out local and state-owned lands.

- Coordination of stations operating on 700 MHz public safety broadband spectrum with 700 MHz public safety narrowband stations, including management of the internal public safety guard band.

- Oversight and implementation of the relocation of narrowband public safety operations in channels 63 and 68, and the upper 1 megahertz of channels 64 and 69.

- Exercise of sole discretion, pursuant to Section 2.103 of the Commission's rules, whether to permit Federal public safety agency use of the public safety broadband spectrum, with any such use subject to the terms and conditions of the NSA.

- Responsibility for reviewing and approving requests for early construction and operation of local public safety broadband networks on the 700 MHz public safety broadband spectrum in areas with and without a preexisting build-out commitment in the NSA, pursuant to the procedures and requirements outlined for such waivers as described in 47 C.F.R. § 90.1430.

- Responsibility for reviewing and approving requests for waiver submitted by public safety entities to conduct wideband operations pursuant to the procedures and restrictions in connection with such waivers as described in 47 C.F.R. § 90.1432.

Public Safety Network Service Fees.

- The NSA must include a schedule of fees for public safety access to broadband network services.
- Public safety users of the D Block public safety spectrum will be charged a base rate of $[--.--] per user per month.
- The initial fixed rates in the NSA will sunset at the end of the fourth year of the D Block licensee's license term. After the sunset, applicable rates will be negotiated based on fee schedules developed by the General Services Administration for government users of the commercial spectrum.

Roaming Arrangement

- Each regional D Block licensee must public safety users of all other 700 MHz public safety regional networks with the ability to roam on its network.

- The NSA should further specify the relevant terms and conditions under which roaming will be provided.

Dispute Resolution Process.

- The Commission may resolve any impasse between the parties to the NSA, including, should the Commission find it in the public interest, requiring the parties to accept specified terms resolving the dispute. The Commission's resolution will be final.

- In resolving any disputes between a winning D Block bidder and the PSBL with respect to the terms of the NSA, the Commission will use its discretion to determine how best to take into account the winning D Block bidder's business plan, as well as the requirements of public safety users, when mandating a resolution.

Safeguards for Protection of Public Safety Service

- The D Block licensee must provide to the Public Safety Broadband Licensee monthly network usage statistics.
- The D Block licensee may not discontinue service to public safety entities without the Commission approval.
- The parties must jointly file quarterly reports with the Commission. These reports must include detailed information on the areas where broadband service has been deployed, how the specific requirements of public safety are being met, audited financial statements, which public safety entities (*e.g.*, police, fire departments) are using the broadband network in each area of operation; what types of applications (*e.g.*, voice, data, video) are in use in each area of operation to the extent known; and the number of declared emergencies in each area of operation.

Funding of the PSBL Through the D Block Licensee

- The Public Safety Broadband Licensee must annually create and submit for FCC approval a budget for its administrative and operational expenses. The Public Safety Broadband Licensee also must have an annual audit conducted by an external, independent auditor. The proposed annual budget to be submitted by the Public Safety Broadband Licensee will provide the Commission with an ability to ensure that the Public Safety Broadband Licensee is acting in a fiscally responsible manner and not engaging in activities that exceed the scope of its prescribed roles and responsibilities.
- The Public Safety Broadband Licensee must submit a full financial accounting on a quarterly basis.
- The D Block licensee must make an annual payment to the Public Safety Broadband Licensee of, the sum total of $5 million per year in the aggregate in consideration for the D Block licensee's leased access on a secondary basis to the public safety broadband spectrum.
    - In the event that the D Block is licensed on a regional basis, the Commission will specify after the close of the auction the annual payments required for each license won at auction, such that the total $5 million in annual payments to the Public Safety Broadband Licensee is apportioned on a per region basis, based upon total pops per region.
- The annual payment funds will be placed into an escrow account managed by an unaffiliated third party, such as a major commercial financial institution, for the benefit of the Public Safety Broadband Licensee. The Public Safety Broadband Licensee must seek approval of its selected escrow account manager from the Chief, PSHSB. The Public Safety Broadband Licensee can draw funds on this account to cover its annual operating and administrative expenses in a manner

consistent with its submitted annual budget for that fiscal year. The entirety of the Public Safety Broadband Licensee's annual operating budget shall be based on these annual payments.

- To the extent that the Public Safety Broadband Licensee's actual operating expenses for a given fiscal year turn out to be less than its proposed budget, such that there are excess funds left over at the end of that fiscal year from the annual payment(s) made by the D Block licensee(s) at the beginning of that year, those excess funds may be applied towards the Public Safety Broadband Licensee's funding of administrative or operational expenses for the following fiscal year, or to fund secondary activities, such as the purchase of equipment for the benefit of individual public safety agencies.
- The Public Safety Broadband Licensee is not permitted to: charge a separate lease fee to the D Block licensee(s) for their use of the public safety broadband spectrum or obtain loans or financing from any other sources.

Technical Requirements

- **Interoperability:**
  - The network or networks are required to use the same air interface and provide voice, video, and data capabilities that are interoperable across agencies, jurisdictions, and geographic areas. Interoperable means that the technology, equipment, applications, and frequencies employed will allow all participating public safety entities, whether on the same network or different regional 700 MHz public safety broadband networks, to communicate with one another.
  - All networks are required to support roaming of public safety users from other networks.

- **Satellite Support:** D Block licensees must also ensure the availability to public safety users in their area at least one handset with an integrated satellite solution.

- **Greater Technical Requirements Can Be Purchased:** If a particular public safety agency wishes, for example, greater capabilities than required by the Commission's rules or this NSA, the Public Safety Broadband Licensee may negotiate on its behalf for such improvements, provided the public safety agency provides the requisite financing.

APPENDIX F

Proposed Minimum Opening Bids

Nationwide License

Area	Population		MHz		Minimum Opening Bid
Nationwide	285,620,445		10		$750,000,000

Regional Licenses

PSR		Population	Population Density/ Square Mile	Density Category*	MHz	MHz*pops	$/ MHz*pop	Minimum Opening Bid**
8	New York - Metropolitan	19,092,214	1,940.1	A	10	190,922,140	0.45	$86,335,000
5	California - South	20,637,512	365.2	B	10	206,375,120	0.30	$62,215,000
54	Chicago - Metropolitan	12,685,330	741.8	A	10	126,853,300	0.45	$57,363,000
9	Florida	15,982,378	296.4	B	10	159,823,780	0.30	$48,182,000
19	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut	13,922,517	221.7	B	10	139,225,170	0.30	$41,972,000
6	California - North	13,234,136	133.1	B	10	132,341,360	0.30	$39,896,000
20	Maryland; Washington, DC; Virginia - Northern	7,831,327	648.8	A	10	78,313,270	0.45	$35,413,000
33	Ohio	11,353,140	277.3	B	10	113,531,400	0.30	$34,226,000
28	New Jersey, Pennsylvania, Delaware	10,526,480	463.1	B	10	105,264,800	0.30	$31,734,000
21	Michigan	9,938,444	175.0	B	10	99,384,440	0.30	$29,961,000
10	Georgia	8,186,453	141.4	B	10	81,864,530	0.30	$24,679,000
31	North Carolina	8,049,313	165.2	B	10	80,493,130	0.30	$24,266,000
40	Texas - Dallas	6,503,125	212.6	B	10	65,031,250	0.30	$19,605,000
39	Tennessee	5,689,283	138.0	B	10	56,892,830	0.30	$17,151,000
51	Texas - Houston	5,618,958	223.3	B	10	56,189,580	0.30	$16,939,000
42	Virginia	5,115,733	136.9	B	10	51,157,330	0.30	$15,422,000
36	Pennsylvania	4,801,690	173.5	B	10	48,016,900	0.30	$14,475,000
14	Indiana	4,763,619	152.3	B	10	47,636,190	0.30	$14,361,000
18	Louisiana	4,468,976	102.6	B	10	44,689,760	0.30	$13,472,000
17	Kentucky	4,041,769	101.7	B	10	40,417,690	0.30	$12,185,000
37	South Carolina	4,012,012	133.2	B	10	40,120,120	0.30	$12,095,000
30	New York - Albany	3,182,726	108.3	B	10	31,827,260	0.30	$9,595,000
55	New York - Buffalo	2,852,351	242.1	B	10	28,523,510	0.30	$8,599,000

PSR		Population	Population Density/ Square Mile	Density Category*	MHz	MHz*pops	$/ MHz*pop	Minimum Opening Bid**
43	Washington	5,894,121	88.6	C	10	58,941,210	0.10	$5,923,000
24	Missouri	5,595,211	81.2	C	10	55,952,110	0.10	$5,623,000
3	Arizona	5,130,632	45.2	C	10	51,306,320	0.10	$5,156,000
22	Minnesota	4,919,479	61.8	C	10	49,194,790	0.10	$4,944,000
1	Alabama	4,447,100	87.6	C	10	44,471,000	0.10	$4,469,000
7	Colorado	4,301,261	41.5	C	10	43,012,610	0.10	$4,322,000
53	Texas - San Antonio	3,916,309	73.1	C	10	39,163,090	0.10	$3,935,000
13	Illinois	3,722,488	75.9	C	10	37,224,880	0.10	$3,741,000
11	Hawaii	1,211,537	188.6	B	10	12,115,370	0.30	$3,652,000
34	Oklahoma	3,450,654	50.3	C	10	34,506,540	0.10	$3,468,000
35	Oregon	3,421,399	35.6	C	10	34,213,990	0.10	$3,438,000
15	Iowa	2,926,324	52.4	C	10	29,263,240	0.10	$2,941,000
23	Mississippi	2,844,658	60.6	C	10	28,446,580	0.10	$2,859,000
45	Wisconsin	2,692,016	55.7	C	10	26,920,160	0.10	$2,705,000
16	Kansas	2,688,418	32.9	C	10	26,884,180	0.10	$2,702,000
4	Arkansas	2,673,400	51.3	C	10	26,734,000	0.10	$2,686,000
49	Texas - Austin	2,254,226	92.9	C	10	22,542,260	0.10	$2,265,000
41	Utah	2,233,169	27.2	C	10	22,331,690	0.10	$2,244,000
27	Nevada	1,998,257	18.2	C	10	19,982,570	0.10	$2,008,000
29	New Mexico	1,819,046	15.0	C	10	18,190,460	0.10	$1,828,000
44	West Virginia	1,808,344	75.1	C	10	18,083,440	0.10	$1,817,000
26	Nebraska	1,711,263	22.3	C	10	17,112,630	0.10	$1,720,000
50	Texas - El Paso	1,472,545	20.3	C	10	14,725,450	0.10	$1,480,000
12	Idaho	1,293,953	15.6	C	10	12,939,530	0.10	$1,300,000
52	Texas - Lubbock	1,086,657	19.5	C	10	10,866,570	0.10	$1,092,000
47	Puerto Rico	3,808,610	1,112.1	D	10	38,086,100	0.02	$765,000
25	Montana	902,195	6.2	D	10	9,021,950	0.02	$181,000
38	South Dakota	754,844	9.9	D	10	7,548,440	0.02	$152,000
32	North Dakota	642,200	9.3	D	10	6,422,000	0.02	$129,000
2	Alaska	626,932	1.1	D	10	6,269,320	0.02	$126,000
46	Wyoming	493,782	5.1	D	10	4,937,820	0.02	$99,000
56	Guam and the Northern Mariana Islands	224,026	575.9	D	10	2,240,260	0.02	$45,000
48	U.S. Virgin Islands	108,612	810.5	D	10	1,086,120	0.02	$22,000
57	American Samoa	57,291	744.0	D	10	572,910	0.02	$12,000
58	Gulf of Mexico	-	N/A	N/A	10	0	N/A	$10,000
		285,620,445						$750,000,000

Density Categories*		$/MHz*pop
A	density ≥ 500	$0.45
B	100 ≤ density < 500	$0.30
C	10 ≤ density < 100	$0.10
D	density < 10	$0.02

* Density Category D also includes PSRs 47, 48, 56, and 57 regardless of population density.

** The proposed minimum opening bids for the regional licenses were calculated using the $/MHz*pop for the corresponding density category, except as noted above. The resulting amounts totaled nearly $750 million. These amounts were then adjusted and rounded so that the total of the minimum opening bids for a set of regional licenses equals the proposed minimum opening bid for the nationwide license.

APPENDIX G

Comments and Reply Comments

List of Comments and Reply Comments
In the 700 MHz Third Further Notice
(WT Docket No. 06-150 and PS Docket 06-229)

This is a list of parties who filed comments and reply comments within the designated comment periods in this proceeding. The complete record in this proceeding is available in the Electronic Comment Filing System located at http://www.fcc.gov/cgb/ecfs/.

Comments

700 MHz Regional Planning Committee, Region 6 (Northern California) (RPC 6)
Ada County Sheriff's Office
Advanced Communications Technology, Inc. (ACT)
Alcatel-Lucent (ALU)
American Association of State Highway and Transportation Officials (AASHTO)
American Hospital Association (AHA)
Andrew M. Seybold (Seybold)
Association of Public-Safety Communications Officials-International, Inc. (APCO)
AT&T Inc. (AT&T)
Big Bend Telephone Company (Big Bend)
Bill Reimann (Reimann)
Capt V. M. Sanders (Sanders)
Carol Barta (Barta)
CDMA Development Group, Inc. (CDG)
Cellular South, Inc. (Cellular South)
Charles L. Jackson, Dorothy Robyn and Coleman Bazelon (Jackson, Robyn, Bazelon)
City and County of San Francisco (San Francisco)
City of Philadelphia (Philadelphia)
Claire Nilles (Nilles)
Coleman Bazelon (Bazelon)
ComCentric Inc. (ComCentric)
Commonwealth of Virginia (Virginia)
Consumer Electronics Association (CEA)
Council Tree Communications, Inc (Council Tree)
Coverage Co.
Cox Communications, Inc. (Cox)
Craig T. Rowland (Rowland)
CTC Telcom, Inc. (CTC)
CTIA -The Wireless Association (CTIA)
David Wills (Wills)
District of Columbia (District)
Ericsson Inc (Ericsson)
Florida Region 9, Regional Planning Committee (RPC 9)
GEOCommand, Inc. (GEOCommand)
Gerard Eads (Eads)
Google Inc. (Google)
Hypres, Inc. (Hypres)
Inmarsat plc (Inmarsat)

Interisle Consulting Group (Interisle)
International Association of Fire Fighters (IAFF)
International Municipal Signal Association, International Association of Fire Chiefs, Inc., Congressional Fire Services Institute, and Forestry Conservation Communications Association (IMSA et al.)
James Lencioni (Lencioni)
Jessica Scheeler (Scheeler)
Jon M. Peha (Peha)
Kennebec Telephone Company, Inc. (Kennebec)
Kentucky Wireless Interoperability Executive Committee (KWIEC)
Kevin Mann (Mann)
King County Washington Regional Communications Board (King County)
Leap Wireless International, Inc. (Leap Wireless)
Mayo Clinic (Mayo)
Mercatus Center at George Mason University (Mercatus)
MetroPCS Communications, Inc. (MetroPCS)
Michael Stiles (Stiles)
Mobile Satellite Users Association (MSUA)
Mobile Satellite Ventures Subsidiary LLC (MSV)
Motorola, Inc. (Motorola)
National Association of Emergency Medical Technicians (NAEMT)
National Association of Telecommunications Officers and Advisors, National Association of Counties, National League of Cities, and U.S. Conference of Mayors (NATOA et al.)
National Emergency Number Association (NENA)
National Public Safety Telecommunications Council (NPSTC)
National Regional Planning Council (NRPC)
New York City Police Department (NYPD)
Northrop Grumman Information Technology, Inc. (Northrop Grumman)
NTCH, Inc. (NTCH)
Oregon State Interoperability Executive Council (Oregon SIEC)
Peñasco Valley Telephone Cooperative, Inc. (PVTC)
Peter G. Cook Consultancy, Inc. (PGCC)
Phil Stalheim (Stalheim)
Pierce County Public Transportation Benefit Area Corporation (Pierce Transit)
Ponderosa Telephone (Ponderosa)
Public Interest Spectrum Coalition (PISC)
Public Safety Spectrum Trust Corporation (PSST)
QUALCOMM Incorporated (Qualcomm)
Region 33 (Ohio) 700 MHz. Regional Planning Committee (RPC 33)
Rehabilitation Engineering Research Center for Wireless Technologies (Wireless RERC)
Rivada Networks (Rivada)
Rural Cellular Association (RCA)
Rural Telecommunications Group, Inc. (RTG)
Sandro Brusco, Giuseppe Lopomo, and Leslie M. Marx (Brusco et al.)
Satellite Industry Association (SIA)
Senator Daniel K. Inouye (Senator Inouye)
Smithville Telephone Company, Inc. (Smithville)
Society of Broadcast Engineers, Incorporated (SBE)
Software Defined Radio Forum (SDR Forum)
Space Data Corporation (Space Data)
Spectrum Acquisitions Inc. (SAI)
Spring Grove Communications (Spring Grove)

Sprint Nextel Corporation (Sprint Nextel)
State of California (California)
State of Louisiana (Louisiana)
State of Mississippi Department of Public Safety (Mississippi)
State of Washington Military Department (Washington)
Stagg Newman (Newman)
Telecommunications Development Corporation (TDC)
Telecommunications Industry Association (TIA)
TeleCommUnity, Charlotte, NC, Houston, TX, & Montgomery Co., MD (TeleCommUnity)
Televate, LLC (Televate)
Tyco Electronics M/A-COM (TE M/A-COM)
United States Cellular Corporation (US Cellular)
Van Buren Telephone Company, Inc. (Van Buren)
Verizon Wireless (Verizon)
Virginia Fire Chiefs Association, Inc. (VFCA)
Virginia Information Technologies Agency (VITA)
Western Fire Chiefs Association (WFCA)
Wiggins Telephone Association (Wiggins)
Wirefree Partners III, LLC (Wirefree)
Xanadoo Corp. (Xanadoo)

Reply Comments

American Association of State Highway and Transportation Officials (AASHTO)
American Petroleum Institute (API)
Association of Public-Safety Communications Officials-International, Inc. (APCO)
AT&T Inc. (AT&T)
City of Philadelphia (Philadelphia)
Council Tree Communications, Inc. (Council Tree)
CTIA -The Wireless Association (CTIA)
Cyren Call Communications Corporation (Cyren Call)
Google Inc. (Google)
Intelligent Transportation Society of America (ITS America)
International Assn. of Chiefs of Police & National Sheriffs' Assn. (IACPNSA)
International City/County Management Association (ICCMA)
International Municipal Signal Association, International Association of Fire Chiefs, Inc., Congressional Fire Services Institute, and Forestry Conservation Communications Association (IMSA et al.)
Joe Hanna (Hanna)
Leap Wireless International, Inc. (Leap Wireless)
Maryland Broadband Cooperative (MBC)
Michael Dasso (Dasso)
Motorola, Inc. (Motorola)
National Association of Telecommunications Officers and Advisors, National Association of Counties, National League of Cities, and U.S. Conference of Mayors (NATOA et al.)
National Association of State Emergency Medical Services Officials (NASEMSO)
National Public Safety Telecommunications Council (NPSTC)
New York City Police Department (NYPD)
Nextwave Wireless, Inc. (Nextwave)
Northrop Grumman Information Technology, Inc. (Northrop Grumman)
Public Safety Spectrum Trust Corporation (PSST)

Regional Planning Committee Twenty (RPC 20)
Bill Reimann (Reimann)
Rivada Networks (Rivada)
Satellite Industry Association (SIA)
SouthernLINC Wireless (SouthernLINC)
Space Data Corporation (Space Data)
Sprint Nextel Corporation (Sprint Nextel)
TeleCommUnity, Charlotte, NC, Houston, TX, & Montgomery Co., MD (TeleCommUnity)
Televate, LLC (Televate)
Tyco Electronics M/A-COM (TE M/A-COM)
United States Cellular Corporation (US Cellular)
Verizon Wireless (Verizon)

STATEMENT OF
CHAIRMAN KEVIN J. MARTIN

Re: Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229, *Third Further Notice of Proposed Rulemaking*, FCC 08-230

Since the *Second Further Notice* adopted in May, we have received significant public input (including from the public safety community, wireless providers, and others), through filed comments, Congressional hearings, and the Commission's *en banc* hearing in New York. While parties differ on how we should get there, all agree that public safety continues to have a critical and unfulfilled need for a nationwide interoperable broadband network that will link first responders across geography, jurisdictions and departments.

Today's decision is a further notice and not a final action. It is the next step in our effort to provide our Nation's first responders with the broadband network they need and deserve. The proposals in the *Third Further Notice* provide substantial detail and specificity, including draft rules, which will allow potential bidders to fully assess what their obligations will be, and make fully informed determinations as to how the public-private partnership may fit their business plans. It attempts to strike the right balance between serving the communications needs of public safety and the need to ensure commercially viability of the partnership.

Let us be clear about what is at stake; without the partnership, there are no other viable tools for the Commission to ensure that this network can be built in a timely manner, with a maximum level of interoperability for use by all public safety entities small and large, rural and urban.

The overriding consideration in all of the proposals in the *Third Further Notice* is ensuring the maximum level of interoperability on a network that is built out to as many public safety entities as possible. In this respect, the *Further Notice* proposes to use the auction mechanism itself to select a single air interface, which is the best way to ensure full interoperability. While there is a valid use for bridges and gateways to connect disparate networks, without a single air interface full interoperability cannot be achieved.

With respect to the other commercial provisions of the item, I believe they balance the need to provide certainty and the desire to preserve sufficient flexibility. The proposal to reduce minimum opening bids during the auction for unsold regions in certain circumstances will ensure that the regional license sets have the maximum opportunity to overcome a national bid while maintaining the goal of maximizing the network's reach. The specific technical proposals add an additional layer of specificity that will allow detailed assessment by the potential commercial partners while providing enhanced network capabilities, coverage, hardening and resiliency to meet public safety's needs.

With respect to the questions and tentative conclusions related to the Public Safety Broadband Licensee, this *Third Further Notice* recognizes the critical role that the PSBL will play in the partnership while clarifying the Commission's expectations as to how the relationship with the D Block licensee should function. Further, the transparency, accountability, and conflict of interest provisions proposed will help assure public safety community that its needs are being fully represented as well as assuring the commercial D Block licensee(s) that the PSBL is focused and ready to serve as a positive partner with complimentary goals.

I remain committed to providing the public safety community with a clear path forward to

achieving a nationwide interoperable broadband network. The public safety community has expressed its desire to have rules adopted by the end of the year, and we owe it to them to do everything within our power to resolve these issues swiftly.

I recognize that the current economic climate may be challenging. I would note that this further notice establishes the rules of the auction but it will be several months before it actually begins. In this notice we do not set forth a date for the auction, in fact, today we ask what the appropriate timing for starting such auction should be.

Moreover, we - - and more importantly public safety and the American people - - cannot afford to wait. In the seven years since 9/11 we have experienced enormously destructive hurricanes and tornadoes and deadly bridge collapses. Fortunately we have not experienced another terrorist attack. Simply put, we cannot afford to wait until we do.

Finally, it remains important to make the valuable natural resource of spectrum available to the marketplace in a timely manner. Having rules adopted promptly will also provide the commercial marketplace with certainty, and allow sufficient time for potential bidders to make plans and secure financing for the auction when it occurs.

I believe we must move forward and take another step closer to reaching the goal of a truly interoperable nationwide public safety network.

I thank my colleagues and the Bureaus for their work on this item, and am looking forward to hearing specific comment on the details we have proposed.

SEPARATE STATEMENT OF COMMISSIONER MICHAEL J. COPPS, CONCURRING

Re: Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229, *Third Further Notice of Proposed Rulemaking*, FCC 08-230

The measure of success for this auction is quite simple: whether it results in a public safety network that meets the needs of our nation's first responders. How we actually get from here to there is, of course, far more complicated, and I will turn to that in a moment. But I know that all of my colleagues and I agree that the gold standard here is whether we come up with a system that ***actually delivers for public safety.***

I limit myself to concurrence in today's item because I have concerns about whether the service rules we propose fully measure up to this high standard. I concur because I think we have a still-inadequate grasp of the precise contours of what it is that we propose to build; how to incent its construction and operation; how to make sure public safety can afford to use whatever is built; and how exactly, or even generally, the safety of the American people will be enhanced. Indeed, some believe the network envisioned in this item may not be substantially more robust than existing commercial networks—and for which public safety users may be asked to pay a significant fee ($48.50 per user, per month) that many of them may be unable to afford. A network that is too expensive for first responders to use is little better than no network at all. "Let them eat cake" is simply not an acceptable answer when it comes to the public safety heroes who put their lives on the line every day to keep us safe. The system we build must ***attract*** users rather than shut out already cash-strapped public safety entities.

I am concerned that our item does not precisely specify what services and rights public safety users get in return for their per user, per month fee. This should be viewed as a core question, both in terms of serving public safety's needs and in making the public-private partnership financially viable. Does it allow a user to stream high-quality video? How often and how high-quality? Does it allow them to use VoIP applications (which some commercial wireless providers today do not allow)? How often and at what quality of service? Is a single police officer with a mobile device on his or her hip and a laptop computer in the police car one user or two for the purposes of the $48.50 fee? I am also concerned that technical questions regarding speed, building penetration, and the functionalities of the network for public safety users are not precisely defined. And I am concerned that the FCC does not know how these factors and the degree of "hardening" we require compares to the standards of existing commercial—let alone public safety—networks. Ambiguities like these are essential to address up-front. If we leave them to later, uncertainties can only discourage potential bidders from participating. We've been down that uncertain road before with regard to the D Block. Once was enough.

Nor am I sure that today's item adequately deals with the question of how extensive—in terms of covering the maximum number of states—a public-private network must be in order for us to accept it as an appropriate use of public safety's spectrum. To begin with, our rules depart from the assumption in the previous auction that the network will necessarily be a 100% nationwide network. In fact, the rules we propose today specify that even if bidders appear for as few as 11 of the country's 58 geographic regions, we will go ahead and build a network in those limited areas without any firm plan for how to create coverage in the rest of the country. So if a few big states and metro regions get "sold," all the rest of this spectrum could lie fallow.

On the other hand, we also have to deal with the reality that, in light of the failure to attract a single nation-wide bidder in the last auction, the best way to serve public safety users may be through a

number of regional networks that use a common technological standard. Indeed, it is possible that regional carriers may in some areas be the best partners for public safety—with better coverage and the ability to tailor their networks to local needs. So I am also concerned that our rules allow the possibility that one company could win a single national license for a relatively low bid, even if other companies were willing to pay far more, in the aggregate, for regional licenses. That is because our proposed rules specify that we will always go with a national licensee over regional licensees if even ***one*** of the 58 regions regions (no matter how small) fails to receive a bid. This could tilt the balance too far in the other direction. While I recognize this is certainly one of the most difficult questions before us, I am not sure we've arrived at an acceptable solution.

Then there is the daunting matter of incentives for getting this network built by a commercial bidder or bidders. Building a viable model that would attract bidders and builders was always going to be a challenge, we knew that. And we failed on this score our first time out. But, many months later, we still don't have a clue about what it will take to attract the ten, fifteen or twenty billion dollars to actually deploy a public safety network. The wreck and ruin left in the wake of last week's financial melt-down only make matters worse—perhaps infinitely so. Finding money in the hallowed canyons of Wall Street or anywhere else to get this network built makes Indiana Jones' searchings look like child's play. Lack of certainty on top of lack of funding will not a public safety network make. Before we set an auction process into motion—before we even design the incentives necessary—the FCC simply must get a firm fix on what the rough costs of the public safety network are going to be. We need to know that this investment is something bidders can actually expect to recoup under the rules we establish—or else we won't get any bidders this time around either. I would just as soon take my chances passing a tin cup on Wall Street as put my faith in plunging financial markets finding a way to pony up billions for a network whose design and business case the FCC doesn't fully understand and has not, to my mind, sufficiently investigated.

Uncertainties abound. We don't know, for example, the trade-offs that would come from changing the monthly fee cap to, say, $20 per user per month, or from adjusting the balance between regional and national bidding. We don't know how the business case would change if we said that public safety users can stream video at 200 kilobits per second for only 4 hours a day—or not at all. We don't know what would happen if we said that that police officer with a mobile device and a vehicle-based radio should count as one user rather than two. Without such granular knowledge, we are flying blind. I know we are asking questions about such things in this Further Notice, and that's good, but at this stage we should have more answers than questions. If this is really going to be the last chance for comment before final auction rules are promulgated, today's proposal should rest on a more solid foundation than it does.

Making this particular public-private partnership work is a task that goes far beyond the demands of a typical spectrum auction. I have called on many occasions for the FCC to develop these capabilities in-house or to reach a consulting relationship with outside experts whose insights could have and should have informed the item before us. Even at this late juncture, I think it would be prudent for the FCC to engage some sort of outside consultant to assess the cost of the network specifications we propose today and the business case (or lack of a business case) for the public-private partnership described in the item. At least their insights could inform the final rules. But it does not appear this is going to happen.

Let me be clear—my purpose here is not delay. While I believe the past several months could have been used more productively, I applaud the desire of Chairman Martin to put public safety front-and-center here at the Commission. That was a long time coming at the FCC, but he is the one who did it. And I appreciate the work done by all kinds of interested parties, particularly the leading public safety organizations who have worked to move the process forward. I totally share their sense of urgency, for it has been over seven years since 9/11 and three since Hurricane Katrina, and the American people are still

without a public safety wireless network capable of enhancing their safety. This ***is*** urgent business.

But I also believe that the only goal more pressing than doing this quickly is doing it right. I recognize, of course, that the line between moving fast and moving too fast is difficult to draw—and reasonable minds can certainly disagree about where to draw it. For my money, however, today's item falls on the wrong side of that line. And the stakes couldn't be higher: if we fall into the trap of committing public safety's 700 MHz spectrum to a public-private partnership that does not serve the needs of public safety, it's hard to envision a do-over or another bite at the apple. We will have squandered maybe our last best hope for getting it right for public safety.

The good news is that today's item gives commenters a proposal to consider that is specific in many respects. I appreciate the willingness of Chairman Martin and the Offices and Bureaus who worked on this item to create a set of proposals that tees up many of the appropriate details. I also am grateful for the willingness of my colleagues to offer proposed rules for comment. A decision with such profound implications for national security certainly demands the highest level of care and examination, especially given that our previous effort to create a public-private network was unsuccessful. I am pleased that commenters on the item will now have longer than the 14 days for initial input and 7 days for reply comments we suggested last spring. An issue so important and complicated as this one certainly warrants at least the 30 days for comment and 10 days for replies that we establish today—indeed, I would have preferred a somewhat longer period, given the many questions that remain unanswered.

The days immediately ahead are evidently going to be our only remaining opportunity to fill the many gaps I have cited. This is our last chance to insert real-world expertise and judgment into the proceeding. We need as many experts and organizations and stakeholders to step up to the plate and give us their help as we can find. I am asking, I am pleading, for this level of participation. And I am especially eager to see the reaction to our proposal from public safety users, our expert national organizations as well as the states and local jurisdictions that must decide whether to pay to use any network that is built. It is time for you to tell us what you really think—up or down, yes or no, move forward or go back to the drawing board. As I have said before, much as it would pain me to go back to the drawing board yet again, that outcome is preferable to committing ourselves to a flawed result. But if stakeholders and interested parties really chime in over the next 40 days with their best and brightest thinking, we may just be able to get this right and move toward final auction rules in a timely fashion.

Thanks to each of my colleagues for their ongoing attention to this important matter, thanks again to the Chairman for keeping public safety front-and-center, and my deep, deep gratitude also for the hard and dedicated work of Chief Poarch, Jim Schlichting, Julie Knapp and their capable and committed FCC teams.

STATEMENT OF
COMMISSIONER JONATHAN S. ADELSTEIN
Concurring in Part, Dissenting in Part

Re: Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229, *Third Further Notice of Proposed Rulemaking*, FCC 08-230

Our decision today to propose revised rules for the establishment of a mandatory public/private partnership in the 700 MHz band represents a compromise in large part. With this second bite at the apple, we have, in some respects, admirably provided more detail to better inform potential bidders as to the structure and specifications of a nationwide interoperable broadband network. I am pleased we are following the suggestion that I strongly advocated to proceed with a *Further Notice* before going to final rules.

Given the vagaries upon which many of the proposals here are based, it is especially critical that we put this out for comment before finalizing it. Rather than relying on much needed independent technical and financial expertise, we have handed down a host of tentative conclusions that reflect disparate comments from interested parties.

As all of us know, broadband infrastructure and broadband networks are offering unprecedented opportunities for improving and harmonizing the capabilities of our public safety community. Increasingly, law enforcement agencies are demanding real-time, wireless access to mission-critical information on the field – a vital component to improving the responsiveness of first responders. With advancements in wireless technologies and the ability to offer an increasingly wider range of services and at faster speeds, our public safety community is eager to take advantage of the expanded capabilities these technologies bring. From surveillance videos, to the transmission of photos and other critical data, broadband infrastructure and broadband networks offer unprecedented opportunities for improving and harmonizing the capabilities of our public safety community.

Yet in spite of these opportunities, our nation's public safety users remain on outdated systems that have not kept apace with the IP evolution taking place on commercial systems. Indeed, many states continue to operate under a patchwork system of incomplete technology solutions that do not enable first responders to communicate efficiently and effectively nor do they have the capabilities to transmit critical data at any time and place.

In the face of these opportunities and challenges, the Commission is charged with gathering all it can at its disposal to realize an interoperable network for public safety to ensure that we are promoting the "safety of life and property." Given our responsibilities in this regard, it was my hope this time around to generate a set of rules that provided real incentives and laid the groundwork for building the most advanced and interoperable nationwide network possible through a careful balance of flexibility and conditions that were laid out clearly and explicitly upfront.

Instead, while I believe we have taken a measured step forward by putting out this Third Further Notice, I remain concerned that our proposed rules are not buttressed by sound outside expert advice on the myriad of highly complex technical and cost issues presented. Though I am pleased we put out detailed plans, I simply do not agree with all of them. In the end, I fear we have crafted a set of blueprints on the basis of a few interested contractors, without having solicited the expertise of architects and engineers.

Admittedly, attempting to resurrect a public/private partnership out of the ashes of the last auction is fraught with difficulty. I thank the Chairman and all of my colleagues for their good faith effort to meet that challenge. Unfortunately, this attempt falls short. It is not based on a solid economic or technical analysis that gives me sufficient confidence that we have assembled the elements for a successful auction. I am concerned that our efforts here, however well meaning, are yet another a shot in the dark.

For example, the item before us contains no analysis of the cost of building out the alternative approaches, the value of the spectrum, or revenue projections based on the prices we assume here. It would appear that some of the numbers that are suggested are based on educated guesses as opposed to solid evaluations based on independent expert analysis. We would have been better served to have followed Commissioner Copps' suggestion that we retain expert analysts, both technical and financial, which would have helped with such a monumental undertaking.

Without this basis, we have no way to determine, for example, whether such a large upfront minimum bid requirement of $750 million permits a sustainable business model, or dooms this enterprise to failure from the outset. There is no analysis provided in the item to explain this number. We are offering for sale a valuable asset, but not one of unlimited value. And we are expecting major investments to be made by private enterprise to meet the needs of public safety. Despite these hurdles, we have not undertaken to assess whether the costs we are asking the private sector to bear have any relationship to the returns it can expect. I would have preferred to see much of the amount that will go to the minimum bid to go to building out the network rather than paying for the spectrum.

Particularly in light of the unprecedented credit crunch facing our nation's economy, it is irresponsible for an expert agency to pull numbers out of thin air that generate revenue for the Treasury but deprive the private sector of the means to accomplish our ultimate goal of a viable public safety network. Our first priority should be helping our first responders, not raising money. Some might say that such an astounding sum is necessary to ensure bidders are serious. We have done no analysis to see whether $750 million or $100 million or any other number would have been sufficient. If we had opted for $100 million, to pick an example, the bidder could have put $650 million more into the network for public safety. While I appreciate that the majority has agreed to seek comment on a lower amount, I cannot put my vote behind such a high figure arrived at so arbitrarily.

Similarly, I cannot support the tentative conclusion regarding the tiered final benchmark for performance requirements. The proposal is taken out of whole cloth from the suggestion of one interested party, with no independent analysis on our part. We are consigning Rural America to second class status based on the preferences of one commercial company that presumably wants to bid and minimize its costs to maximize its profits. While that is perfectly rational behavior for a private company, it is an abdication of its duty for a Federal agency to adopt one company's agenda, no questions asked, when the public safety of Rural America is at stake. Knowing the benefits of public safety communications for Rural America, I would have preferred that we mandate rural areas get built out at the same pace as urban areas.

I am also concerned about the default penalty requirement that is triggered if the D block licensee chooses not to comply with an adjudication decision by the Commission or otherwise refuses to execute a Commission approved Network Sharing Agreement. That could prove yet another real disincentive to bidders. I would have preferred that we looked equally at the suggestion of some in the record that the Commission either eliminate the default payment entirely or consider basing the default payment liability on a standard of "bad faith." We also could have provided sufficient assurances through alternative means so that such a penalty might be reduced or removed.

I do want to thank the Chairman and my colleagues for agreeing to solicit additional comment on

several issues I raised. These include the use of bidding credits for stimulating participation in the auction, ways in which we might rely on satellite capability to provide licensees with additional flexibility for meeting coverage requirements, and consideration of how we might incorporate non-traditional technologies into our rules.

While I appreciate that my colleagues have agreed to increase the comment and reply pleading cycle period by 16 and 3 days respectively, I would have preferred that we give commenters 45 days and 15 days for replies. If we were confident we had hit the mark with this proposal, a shorter comment period could have been warranted in the interest of speeding this along. I remain troubled that this comment period is inadequate, particularly in light of our less than cogent proposals. We should have taken pains not to give the appearance that we are going through the motions, rather than doing everything we can to get it right.

I must extend my thanks to the staff of our Wireless and Public Safety Bureaus as well as to our Office of Engineering and Technology who worked tirelessly to bring forward these proposals with the resources available to them.

Ultimately, I can only concur in part and dissent in part in this decision. In short, I do not believe we have adequately developed a foundation upon which to assess the viability of these proposals in the real world, especially under the current stress in the financial markets. It is hard to have confidence that this plan will succeed, since we did not do the analysis to see if the cost-benefits are met for any private sector partner. These barriers to a successful auction, in conjunction with a less than meaningful comment cycle, cause me considerable pause.

Because we took this interim step of issuing a *Further Notice*, it is not too late. We can still get the expert input and conduct the analysis we need. I appreciate the many helpful suggestions made in this process by public safety agencies. We need more of your input, now more than ever, to help us achieve a consensus that will work for you in the field.

Although, I cannot support today's item in full, I remain hopeful that, after a lot of hard work and further refinement, I will be able to support the final *Order* that emerges from it.

STATEMENT OF COMMISSIONER DEBORAH TAYLOR TATE

Re: Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229, *Third Further Notice of Proposed Rulemaking*, FCC 08-230

Over a year ago – on July 31st, 2007 – the Commission adopted the *700 MHz Second Report and Order*. That item established rules for the most impressive spectrum auction in U.S. history, which made over 1,000 licenses available and raised $19 billion for the U.S. Treasury, money our government desperately needs these days. The *Second Report and Order* also adopted a public/private partnership between the 700 MHz band commercial licensee in the D block and the Public Safety Broadband Licensee, with the specific goal of "making a nationwide, interoperable broadband network available to state and local public safety users."[985] While the D block license did not sell, the Commission has been provided the opportunity to reconsider our approach in this critical matter affecting the safety and lives of all citizens.

Today we adopt the *700 MHz Third FNPRM* to better tailor our rules related to the D block and public safety spectrum. I commend Chairman Martin for his efforts to address some of the concerns previously raised. For example, with regard to the public/private partnership, there now is much greater specificity and additional transparency in the rules governing the relationship between the commercial licensee(s) and public safety.

In establishing these and all rules related to the 700 MHz band, the Commission must balance multiple and yet equally compelling public policy goals. First and foremost is the goal of access to a nationwide, interoperable broadband network for the benefit of public safety. In addition, we must promote the deployment of this network as quickly and as efficiently as possible, which means cooperative efforts on the part of the commercial licensee in the D block and its public safety partners. We also must ensure that our rules meet the specific needs of local public safety providers on the ground, such as robustness and survivability, coverage and penetration, spectrum efficiency, and operating and capital costs. The Commission must strike the right balance as it promotes all these worthy goals. This is a grave and serious responsibility.

Thus, over the past six months, I have met with, toured and sought input from public safety service providers in a number of jurisdictions across the country, including New Orleans, New York, San Francisco, and Washington, DC. These communities have invested millions of taxpayer dollars and have already embarked on creating interoperable networks, and I thank them for their leadership and willingness to share their real-world experiences. In addition, other local communities have offered valuable input in the record,

[985] *See* Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150, Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones, WT Docket No. 01-309, Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, WT Docket 03-264, Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission's Rules, WT Docket No. 06-169, Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229, Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, WT Docket No. 96-86, Declaratory Ruling on Reporting Requirement under Commission's Part 1 Anti-Collusion Rule, WT Docket No. 07-166, *Second Report and Order*, 22 FCC Rcd 1528,15428 (2007) (*700 MHz Second Report and Order*) *recon. pending*.

including Charlotte, NC; Houston, TX; and Montgomery County, MD; and we should be listening to all those who know best.

Of particular importance to me is the issue of facilitating swift deployment of public safety communications capablities, whether by the D block licensee or by the local public safety entity. I recognize that the D block licensee potentially may not face an interim build out benchmark until 2013; at best, almost five years from now. For that reason, I have argued that there should be clear rules that not only allow but encourage public safety entities to build out their networks in the 700 MHz band in advance of deployment by the D block licensee. The Commission's rules should provide incentives, not disincentives, for early build out. Those public safety entities that already are deploying – whether funded by local, State or Federal tax dollars – should not be penalized for their efforts. I encourage both public safety communications providers, as well as potential bidders for the D block license, to offer specific and constructive comments on this matter.

With regard to the prices that will be paid by public safety entities for services offered by the D block licensee, I encourage commenters to describe in detail the various considerations our rules should address, especially given the unique operating conditions and needs of public safety communications providers and how these vary across regions. These differences include such factors as the need for hardening, in-building penetration in urban areas, extensive geographic coverage in rural areas, topography, weather, and much more. It is difficult to imagine how the Commission may set a one-size-fits-all price cap for communications services that adequately reflects these and many other relevant factors, and I therefore urge commenters to address this question in detail.

As we proceed in establishing rules for this portion of the 700 MHz band, we face an historic opportunity for the Commission, for public safety, and indeed for the citizens of this country. With this as with other issues of this magnitude, we must not make decisions in a vacuum. Given the also historic economic crisis on Wall Street that now threatens Main Street, we must make our decisions with greater prudence, and call upon those involved in the banking and financial markets to share their knowledge and experience – including any difficulties licensees may face regarding access to capital at this time.

My thanks to the best and brightest of the Commission who have worked so hard on this issue over many months, and now years. And to our public safety providers and first responders who, as we consider these issues, go about the work of protecting us 24/7.

STATEMENT OF
COMMISSIONER ROBERT M. McDOWELL

Re: Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229, *Third Further Notice of Proposed Rulemaking*, FCC 08-230

In a better world, Congress would have appropriated funding for construction of a nationwide interoperable public safety network suitable for 21st century challenges – either way back in 1997, as part of its original allocation of 24 megahertz of the 700 MHz band for public safety use; or in early 2006, as part of the DTV Act. In the absence of congressional action, the Commission last summer developed a plan to spark a public/private partnership by allocating an additional 10 megahertz of spectrum for public safety use, known as the "D Block." We did this to try to create an incentive for the private side of the public/private partnership to invest risk capital to construct the network. We are here today because this important objective of the 700 MHz auction was not met. So here we are, trying again.

While I question certain of the tentative conclusions in today's Further Notice, I am voting to approve because I believe that the general framework we adopt attempts to move us forward. Putting forth an admittedly imperfect proposal is much better than doing nothing. Yes, this proceeding involves complex legal, administrative and technical issues. Given the stakes, however, I am not willing to engage in a seemingly endless "analysis paralysis." And, I thank Chairman Martin for his leadership and commitment to completing this important proceeding in the near term.

Since the conclusion of our previous auction, I have continued to meet with a large number of parties and have learned a great deal about the concerns of both potential bidders and public safety entities. We've spent a lot of time weighing and balancing the natural tensions between the public and private sides of this partnership. While I am hopeful that today's proposal will help to address many of those concerns, I am not entirely confident that this Further Notice will produce a consensus solution. First, at this stage, there is no critical mass behind any commercial proposal. Further, the lack of consensus among public safety entities appears to be only getting worse. Perhaps I should not be surprised by these circumstances since there are thousands of public safety jurisdictions in the United States, each with unique personnel, deployment, topography, network, and RF propagation issues. Nonetheless, this lingering discord makes completing our task more difficult.

I remain fully committed to continuing to examine all options that may lead to the construction, and continued operation, of a nationwide interoperable public safety network. I am grateful to the FCC staff – in OET, the Wireless Bureau, and the Public Safety & Homeland Security Bureau – as well as to all of the parties that have participated in this process. Many people put a lot of time and thought into this proposal. I look forward to continuing to work with all of you.